

# 50 USC Title 5 General Provisions

## 47

### Telecommunication

#### PART 80 TO END

Revised as of October 1, 1975

## 48

### (Reserved)



CONTAINING  
A CODIFICATION OF DOCUMENTS  
OF GENERAL APPLICABILITY  
AND FUTURE EFFECT

AS OF OCTOBER 1, 1975

*With Ancillaries*

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§ 95.145 Operating conditions.

(a) The Canadian licensee may not under any circumstances begin operation until he has received a permit issued by the Commission.

(b) Operation of station by a Canadian licensee under a permit issued by the Commission must comply with all of the following:

(1) The provisions of this subpart and of Subparts A through D of this part.

(2) Any further conditions specified on the permit issued by the Commission.

§ 95.147 Station identification.

The Canadian licensee authorized to operate his radio station in the United States under the provisions of this subpart shall identify his station by the call sign issued by the appropriate authority of the government of Canada followed by the station's geographical location in the United States as nearly as possible by city and state.

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<sup>1</sup> 38 FR 1506, Jan. 13, 1973.

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**AUTHORITY:** The provisions of this Part 97 issued under 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303. Interpret or apply 48 Stat. 1064–1068, 1081–1105, as amended; 47 U.S.C. 151–155, 301–609.

**Subpart A—General**

**SOURCE:** The provisions of this Subpart A appear at 28 FR 14182, Dec. 21, 1963, unless otherwise noted.

**§ 97.1 Basis and purpose.**

The rules and regulations in this part are designed to provide an amateur radio service having a fundamental purpose as expressed in the following principles:

(a) Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with



respect to providing emergency communications.

(b) Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art.

(c) Encouragement and improvement of the amateur radio service through rules which provide for advancing skills in both the communication and technical phases of the art.

(d) Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.

(e) Continuation and extension of the amateur's unique ability to enhance international good will.

### § 97.3 Definitions.

The following definitions are used in this part:

(a) *Amateur radio service.* A radio communication service of self-training, intercommunication, and technical investigation carried on by amateur radio operators.

(b) *Amateur radio communication.* Noncommercial radio communication by or among amateur radio stations solely with a personal aim and without pecuniary or business interest.

(c) *Amateur radio operator.* A person interested in radio technique solely with a personal aim and without pecuniary interest, holding a valid Federal Communications Commission license to operate amateur radio stations.

(d) *Amateur radio license.* The instrument of authorization issued by the Federal Communications Commission comprised of a station license, and in the case of the primary station, also incorporating an operator license.

*Operator license.* The instrument of operator authorization including the class of operator privileges.

*Station license.* The instrument of authorization for a radio station in the amateur radio service.

(e) *Amateur radio station.* A station licensed in the amateur radio service embracing necessary apparatus at a particular location used for amateur radio communication.

(f) *Primary station.* The principal amateur radio station at a specific land location shown on the station license.

(g) *Military recreation station.* An amateur radio station licensed to the person in charge of a station at a land location provided for the recreational use of amateur radio operators, under

military auspices of the Armed Forces of the United States.

(h) *Club station.* A separate amateur radio station for use by the members of a bona fide amateur radio society and licensed to an amateur radio operator acting as the station trustee for the society.

(i) *Additional station.* Any amateur radio station licensed to an amateur radio operator normally for a specific land location other than the primary station, may be one or more of the following:

*Secondary station.* Station licensed for a land location other than the primary station location, i.e., for use at a subordinate location such as an office, vacation home, etc.

*Control station.* Station licensed to conduct remote control of another amateur radio station.

*Auxiliary link station.* Station, other than a repeater station, at a specific land location licensed only for the purpose of automatically relaying radio signals from that location to another specific land location.

*Repeater station.* Station licensed to automatically retransmit the radio signals of other amateur radio stations for the purpose of extending their intra-community radio communication range.

*Special Event Station.* Station licensed at a specific land location for operation related to the celebration of an event, past or present, which is unique, distinct, and of general interest to either the public or to amateur radio operators, for the purpose of bringing public notice to the Amateur Radio Service.

(j) *Space radio station.* An amateur radio station located on an object which is beyond, is intended to go beyond, or has been beyond the major portion of the earth's atmosphere. (Regulations governing this type of station have not yet been adopted and all applications will be considered on an individual basis.)

(k) *Terrestrial location.* Any point within the major portion of the earth's atmosphere, including aeronautical, land, and maritime locations.

(l) *Space location.* [Reserved]

(m) *Amateur radio operation.* Amateur radio communication conducted by an amateur radio operator from an amateur radio station. May include one or more of the following:

*Fixed operation.* Radio communication conducted from the specific geographical land location shown on the station license.

**Portable operation.** Radio communication conducted from a specific geographical location other than that shown on the station license.

**Mobile operation.** Radio communication conducted while in motion or during halts at unspecified locations.

(n) **Control.** Techniques for accomplishing the prerequisite responsibilities for the immediate operation of an amateur radio station. Must be one or more of the following:

(1) **Local control.** Manual control, with the control operator monitoring the operation on duty at the control point located at a station transmitter with the associated operating adjustments directly accessible. (Direct mechanical control, or direct wire control of a transmitter from a control point located on board any aircraft, vessel, or on the same premises on which the transmitter is located, is also considered local control.)

(2) **Remote control.** Manual control, with the control operator monitoring the operation on duty at a control point located elsewhere than at the station transmitter, such that the associated operating adjustments are accessible through a control link.

(3) **Automatic control.** The use of devices and procedures for control so that a control operator does not have to be present at the control point at all times. (Only rules for automatic control of repeater systems have been adopted. Automatic control of all other types of amateur radio stations must be approved by the Commission on a case-by-case basis.)

(o) **Control link.** Apparatus for effecting remote control between a control point and a remotely controlled station.

(p) **Control operator.** An amateur radio operator designated by the licensee of an amateur radio station to also be responsible for the emissions from that station.

(q) **Control point.** The operating position of an amateur radio station where the control operator function is performed.

(r) **Antenna structures.** Antenna structures include the radiating system, its supporting structures, and any appurtenances mounted thereon.

(s) **Antenna height above average terrain.** The height of the center of radiation of an antenna above an averaged value of the elevation above sea level for the surrounding terrain.

(t) **Transmitter.** Apparatus for converting electrical energy received from a source into radio-frequency electromagnetic energy capable of being radiated.

(u) **Effective radiated power.** The product of the radio-frequency power, expressed in watts, delivered to an antenna, and the relative gain of the antenna over that of a half-wave dipole antenna.

(v) **System network diagram.** A diagram showing each station and its relationship to the other stations in a network of stations, and to the control point(s).

(w) **Third-party traffic.** Amateur radio communication by or under the supervision of the control operator at an amateur radio station to another amateur radio station on behalf of anyone other than the control operator.

(x) **Emergency communication.** Any amateur radio communication directly relating to the immediate safety of life of individuals or the immediate protection of property.

[37 FR 13543, Sept. 13, 1972, as amended at 37 FR 21993, Oct. 18, 1972; 40 FR 17756, Apr. 22, 1975; 40 FR 26525, June 24, 1975]

## Subpart B—Amateur Operator and Station Licenses

### OPERATOR LICENSES

#### § 97.5 Classes of operator licenses.

Amateur extra class.  
Advanced class (previously class A).  
General class (previously class B).  
Conditional class (previously class C).  
Technician class.  
Novice class.

[28 F.R. 14182, Dec. 21, 1963]

#### § 97.7 Privileges of operator licenses.

(a) **Amateur Extra Class and Advanced Class.** All authorized amateur privileges including exclusive frequency operating authority in accordance with the following table:

Frequencies	Class of license authorized
3500–3525 kHz.....	Amateur Extra Only.
3775–3800 kHz.....	
7000–7025 kHz.....	
14,000–14,025 kHz.....	
21,000–21,025 kHz.....	
21,250–21,270 kHz.....	Amateur Extra and Advanced.
3300–3890 kHz.....	
7150–7225 kHz.....	
14,200–14,275 kHz.....	
21,270–21,350 kHz.....	
50–50.1 MHz.....	



(b) *General Class and Conditional Class.* All authorized amateur privileges except those exclusive frequency operating privileges which are reserved to the Advanced Class and/or the Amateur Extra Class.

(c) *Technician class.* All authorized amateur privileges on the frequencies 50.1–54.0 MHz and 145–148 MHz and in the amateur frequency bands above 220 MHz.

(d) *Novice class.* Those amateur privileges designated and limited as follows:

(1) The power input to the transmitter final amplifying stage supplying radio frequency energy to the antenna shall not exceed 75 watts, exclusive of power for heating the cathode of a vacuum tube(s).

(2) Radio telegraphy is authorized in the frequency bands 3700–3750 kHz, 7100–7150 kHz (7050–7075 kHz when the terrestrial location of the station is not within Region 2), 21,100–21,200 kHz, and 28,100–28,200 kHz, using only Type A-1 emission.

[32 FR 12684, Sept. 1, 1967, as amended at 34 FR 15344, Oct. 2, 1969; 37 FR 6593, Mar. 31, 1972; 37 FR 18544, Sept. 13, 1972; 37 FR 21327, Oct. 7, 1972]

#### § 97.9 Eligibility for new operator license.

Persons are eligible to apply for the various classes of amateur operator licenses as follows:

(a) *Amateur extra class.* Anyone except a representative of a foreign government, who either (1) any time prior to receipt of his application by the Commission has held for at least 1 year an amateur operator license of other than the novice or technician class, issued by any agency of the U.S. Government, or submits proof that he held for a period of 1 year an amateur operator license at least equivalent to a general class license issued by a foreign government, or (2) submits evidence of having held a valid amateur radio station or operator license issued by any agency of the U.S. Government during or prior to April 1917.

(b) *Advanced class.* Anyone except a representative of a foreign government.

(c) *General class.* Anyone except a representative of a foreign government.

(d) *Conditional class.* Except for the representative of a foreign government, anyone:

(1) Whose actual residence and amateur station location are more than 175

miles airline distance from the nearest location at which examinations are held at intervals of not more than 6 months for General Class amateur operator licenses.

(2) Who is shown by physician's certificate to be unable to appear for examination because of protracted disability.

(3) Who is shown by certificate of the commanding officer to be in the armed forces of the United States at any Army, Navy, Air Force, or Coast Guard station and, for that reason, to be unable to appear for examination at the time and place designated by the Commission.

(4) Who furnishes sufficient evidence, at the time of the filing, of temporary residence for a continuous period of at least 12 months outside the continental limits of the United States, its territories or possessions, irrespective of other provisions of this paragraph.

(e) *Technician class.* Anyone except a representative of a foreign government.

(f) *Novice class.* Anyone except a representative of a foreign government or a person who holds, or who has held within the 12-month period prior to the date of receipt of his application, a Commission-issued amateur radio license. The Novice Class license may not be concurrently held with any other class of amateur radio license.

[40 FR 5367, Feb. 5, 1975]

#### § 97.11 Application for operator license.

(a) An application (FCC Form 610) for a new operator license, including an application for change in operating privileges, which will require an examination supervised by Commission personnel at a regular Commission examining office shall be submitted to such office in advance of or at the time of the examination, except that, whenever an examination is to be taken at a designated examination point away from a Commission office, the application, together with the necessary filing fee should be submitted in advance of the examination date to the office which has jurisdiction over the examination point involved.

(b) An application (FCC Form 610) for a new operator license, including an application for change in operating privileges, which requests an examination supervised by a volunteer examiner under the provisions of § 97.29(b), shall be submitted to the Commission's office at

Gettysburg, Pennsylvania, 17325. The application shall be accompanied by any necessary filing fee and by a request for the written examination material (see § 97.29(b)).

(c) An application (FCC Form 610) for renewal and/or modification of license when no change in operating privileges is involved shall be submitted, together with any necessary filing fee to the Commission's office at Gettysburg, Pennsylvania, 17325.

[28 F.R. 14183, Dec. 21, 1963, as amended at 30 F.R. 8837, July 14, 1965]

### § 97.13 Renewal or modification of operator license.

(a) An amateur operator license, except the Novice Class, may be renewed upon proper application in which it is stated that the applicant has lawfully accumulated, at an amateur station licensed by the Commission, a minimum total of either 2 hours operating time during the last 3 months or 5 hours operating time during the last 12 months of the license term. Such operating time, for the purpose of renewal, shall be counted as the total of all that time between the entries in the station log showing the beginning and end of transmissions as required in § 97.103(a), both during single transmissions and during a sequence of transmissions. The application shall, in addition to the foregoing, include a statement that the applicant can send by hand key, i.e., straight key or any other type of hand operated key such as a semi-automatic or electronic key, and receive by ear, in plain language, messages in the International Morse Code at a speed of not less than that which is required in qualifying for an original license of the class being renewed.

**NOTE:** Until further order of the Commission, the showing that the applicant actually operated an amateur radio station or stations for the periods of time specified in § 97.13 will not be required in cases where it is shown that the applicant was unable to conduct such operation because he was on active duty overseas in the armed forces of the United States or was duly enrolled as an employee of an agency of the Federal Government and in the course of such employment was on duty in a foreign country continuously during the last year of the license term: *Provided*, That any such employee of the Federal Government shall submit with his application for renewal of license a statement signed by his agency head, or the chief of the Bureau or Division in which he is employed attesting to such employment.

(b) The Novice Class license will not be renewed.

(c) The applicant shall qualify for a new license by examination if the requirements of this section are not fulfilled.

(d) Application for renewed and/or modification of an amateur operator license shall be submitted on FCC Form 610 and shall be accompanied by the applicant's license. Application for renewal of unexpired licenses must be made during the license term and should be filed within 90 days but not later than 30 days prior to the end of the license term. In any case in which the licensee has, in accordance with the provisions of this chapter, made timely and sufficient application for renewal of an unexpired license, no license with reference to any activity of a continuing nature shall expire until such application shall have been finally determined.

(e) If a license is allowed to expire, application for renewal may be made during a period of grace of one year after the expiration date. During this one year period of grace, an expired license is not valid. A license renewed during the grace period will be dated currently and will not be backdated to the date of its expiration. Application for renewal shall be submitted on FCC Form 610 and shall be accompanied by the applicant's expired license.

(f) When the name of a licensee is changed or when the mailing address is changed a formal application for modification of license is not required. However, the licensee shall notify the Commission promptly of these changes. The notice, which may be in letter form, shall contain the name and address of the licensee as they appear in the Commission's records, the new name and/or address, as the case may be, the radio station call sign and class of operator license. The notice shall be sent to Federal Communications Commission, Gettysburg, Pa., 17325, and a copy shall be kept by the licensee until a new license is issued.

[28 F.R. 14183, Dec. 21, 1963, as amended at 29 F.R. 3230, Mar. 11, 1964; 31 F.R. 6422 Apr. 28, 1966]

### OPERATOR LICENSE EXAMINATIONS

#### § 97.19 When examination is required.

Examination is required for the issuance of a new amateur operator license, and for a change in class of



operating privileges. Credit may be given, however, for certain elements of examination as provided in § 97.25.

[28 F.R. 14183, Dec. 21, 1963]

#### § 97.21 Examination elements.

Examinations for amateur operator privileges will comprise one or more of the following examination elements:

(a) Element 1(A): Beginner's code test at five (5) words per minute;

(b) Element 1(B): General code test at thirteen (13) words per minute;

(c) Element 1(C): Expert's code test at twenty (20) words per minute;

(d) Element 2: Basic law comprising rules and regulations essential to beginners' operation, including sufficient elementary radio theory for the understanding of those rules;

(e) Element 3: General amateur practice and regulations involving radio operation and apparatus and provisions of treaties, statutes, and rules affecting amateur stations and operators;

(f) Element 4(A): Intermediate amateur practice involving intermediate level radio theory and operation as applicable to modern amateur techniques, including, but not limited to, radiotelephony and radiotelegraphy;

(g) Element 4(B): Advanced amateur practice involving advanced radio theory and operation as applicable to modern amateur techniques, including, but not limited to, radiotelephony, radiotelegraphy, and transmissions of energy for measurements and observations applied to propagation, for the radio control of remote objects and for similar experimental purposes.

[32 F.R. 12685, Sept. 1, 1967]

#### § 97.23 Examination requirements.

Applicants for original licenses will be required to pass the following examination elements:

(a) Amateur Extra Class: Elements 1(C), 3, 4(A), and 4(B);

(b) Advanced Class: Elements 1(B), 3, and 4(A);

(c) General Class and Conditional Class: Elements 1(B) and 3;

(d) Technician Class: Elements 1(A) and 3;

(e) Novice Class: Elements 1(A) and 2.

[32 F.R. 12685, Sept. 1, 1967]

#### § 97.25 Examination credit.

(a) An applicant for a higher class of amateur operator license who holds a valid amateur operator license issued

upon the basis of an examination by the Commission will be required to pass only those elements of the higher class examination that were not included in the examination for the amateur license held when such application was filed. However, credit will not be allowed for licenses issued on the basis of an examination given under the provisions of § 97.29(b).

(b) An applicant for an amateur operator license will be given credit for either telegraph code element 1(A) or 1(B) if within 5 years prior to the receipt of his application by the Commission he held a commercial radiotelegraph operator license or permit issued by the Federal Communications Commission. An applicant for an amateur extra class license will be given credit for the telegraph code element 1(C) if he holds a valid first class commercial radiotelegraph operator license or permit issued by the Federal Communications Commission or holds any commercial radiotelegraph operator license or permit issued by the Federal Communications Commission containing an aircraft radiotelegraph endorsement.

(c) An applicant for the Amateur Extra Class operator license will be given credit for examination elements 1(C), 4(A), and 4(B), if he so requests and submits evidence of having held a valid amateur radio station or operator license issued by any agency of the U.S. Government during or prior to April 1917, and qualifies for or currently holds a valid amateur operator license of the General or Advanced Class.

(d) An applicant for the amateur extra class operator license will be given credit for examination element 1(C) if he so requests and submits evidence of having held the amateur extra first class license, having continuously held its successor license. An applicant should present his proof in advance of the desired examination time to the Chief, Amateur and Citizens Division, Washington, D.C. 20554 and receive a letter of certification for presentation to the field office where the examination will be taken. No code credit will be given without the letter of certification.

(e) No examination credit, except as herein provided, shall be allowed on the basis of holding or having held any amateur or commercial operator license.

[28 F.R. 14183, Dec. 21, 1963, as amended at 32 F.R. 12685, Sept. 1, 1967; 37 F.R. 19375, Sept. 20, 1972]



**§ 97.27 Availability of Conditional Class license examinations.**

The examinations for Conditional Class will be available only under one or more of the following conditions:

(a) If the applicant's actual residence and proposed amateur station location are more than 175 miles airline distance from the nearest location at which examinations are conducted by an authorized Commission employee or representative at intervals of not more than 6 months for amateur operator license.

(b) If the applicant is shown by physician's certificate to be unable to appear for examination because of protracted disability.

(c) If the applicant is shown by certificate of the commanding officer to be in the armed forces of the United States at an Army, Navy, Air Force, or Coast Guard station and, for that reason, to be unable to appear for examination at the time and place designated by the Commission.

(d) If the applicant demonstrates by sufficient evidence that his temporary residence is for a continuous period of at least 12 months outside the continental limits of the United States, its territories or possessions, irrespective of other provisions of this section.

[28 FR 14184, Dec. 21, 1963, as amended at 30 FR 1944, Feb. 11, 1965]

**§ 97.28 Mail examinations for disabled applicants for Amateur Extra and Advanced Class licenses.**

(a) The Commission may permit the examination for an Amateur Extra or Advanced Class license to be administered by a volunteer examiner selected by the applicant when it is shown by a physician's certificate that the applicant is unable to appear for a Commission supervised examination because of protracted disability.

(b) The volunteer examiner for an Amateur Extra or Advanced Class license examination shall be at least 21 years of age and shall be the holder of a class of amateur operator license equal to or higher than the class of license for which the applicant is being examined. The written portion of the examination shall be obtained, supervised, and submitted in accordance with the procedures set forth in § 97.29(b).

[33 F.R. 7153, May 15, 1968]

**§ 97.29 Manner of conducting examinations.**

(a) Except as provided by § 97.28, the examination for Amateur Extra, Advanced and General Classes of amateur operator licenses will be conducted by an authorized Commission employee or representative at locations and at times specified by the Commission.

(b) Unless otherwise prescribed by the Commission, an examination for the Conditional, Technician, or Novice Class license will be conducted and supervised by a volunteer examiner selected by the applicant. A volunteer examiner shall be at least 21 years of age and shall be the holder of an Extra, Advanced, or General Class Amateur Radio operator license, or shall hold a Commercial radiotelegraph operator license issued by the Commission, or shall be employed in the service of the United States as the operator of a manually operated radiotelegraph station. The written portion of the examination shall be obtained, supervised, and submitted in accordance with the following procedure:

(1) Within ten days after passing the required code test, an applicant shall submit an application (FCC Form 610), together with any filing fee prescribed, to the Commission's office at Gettysburg, Pennsylvania, 17325. The application shall include a written request from the volunteer examiner for the appropriate examination papers. The examiner's written request shall include (i) the names and permanent addresses of the examiner and the applicant, (ii) a description of the examiner's qualifications to administer the examination, (iii) the examiner's statement that the applicant has passed the code test for the class of license involved under his supervision within the ten days prior to submission of the request, and (iv) the examiner's written signature. Examination papers will be forwarded only to the volunteer examiner.

NOTE: When the applicant is entitled to examination credit for the code test under one of the provisions of § 97.25, an application may be submitted without regard to the 10-day limitation. The examiner's request should then state that a code test was not administered for that reason. The applicant should furnish details as to the class, number, and expiration date of any Commercial radiotelegraph license involved.

(2) The volunteer examiner shall be responsible for the proper conduct and

necessary supervision of the examination. Administration of the examination shall be in accordance with the instructions included with the examination papers and as prescribed in §§ 97.29(c) and (d), 97.31, and 97.33.

(3) The examination papers, either completed or unopened in the event the examination is not taken, shall be returned by the volunteer examiner to the Commission's office at Gettysburg, Pa., no later than 30 days after the date the papers are mailed by the Commission (the date of mailing is normally stamped by the Commission on the outside of the examination envelope).

(c) The code test required of an applicant for amateur radio operator license, in accordance with the provisions of §§ 97.21 and 97.23 shall determine the applicant's ability to transmit by hand key (straight key, or if supplied by the applicant, any other type of hand operated key such as a semi-automatic or electronic key) and to receive by ear, in plain language, messages in the International Morse Code at not less than the prescribed speed, free from omission or other error for a continuous period of at least 1 minute during a test period of 5 minutes counting five characters to the word, each numeral or punctuation mark counting as two characters.

(d) All written portions of the examinations for amateur operator privileges shall be completed by the applicant in legible handwriting or hand printing, and diagrams shall be drawn by hand, by means of either pen and ink or pencil. Whenever the applicant's signature is required, his normal signature shall be used. Applicants unable to comply with these requirements, because of physical disability, may dictate their answers to the examination questions and the receiving code test and if unable to draw required diagrams, may dictate a detailed description essentially equivalent. If the examination or any part thereof is dictated, the examiner shall certify the nature of the applicant's disability and the name and address of the person(s) taking and transcribing the applicant's dictation.

[28 F.R. 14184, Dec. 21, 1963, as amended at 33 F.R. 7153, May 15, 1968; 36 F.R. 7217, Apr. 16, 1971]

#### § 97.31 Grading of examinations.

(a) Code tests for sending and receiving are graded separately. Failure to

pass the required code test for either sending or receiving will terminate the examination.

(b) Seventy-four percent (74%) is the passing grade for written examinations. For the purpose of grading, each element required in qualifying for a particular license will be considered as a separate examination. All written examinations will be graded only by Commission personnel.

[28 F.R. 14184, Dec. 21, 1963, as amended at 32 F.R. 12685, Sept. 1, 1967]

#### § 97.33 Eligibility for re-examination.

An applicant who fails examination for an amateur operator license may not take another examination for the same or a higher class amateur operator license within 30 days, except that this limitation shall not apply to an examination for an Advanced or General Class license following an examination conducted by a volunteer examiner for a Novice, Technician, or Conditional Class license.

[32 F.R. 12685, Sept. 1, 1967]

#### § 97.35 Additional examination for holders of operator licenses obtained by mail.

(a) A licensee who holds an amateur license which was obtained by a mail examination under the supervision of a volunteer examiner may be required to appear for a Commission supervised license examination at a location designated by the Commission. If the licensee fails to appear for this examination when directed to do so, or fails to pass such examination, the operator license involved shall be subject to cancellation. When a Novice, Technician, or Conditional Class license is cancelled under this provision, a new license will not be issued for the same class operator license as that cancelled.

(b) [Reserved]

(c) A holder of a Conditional Class license, obtained on the basis of an examination under the provisions of § 97.29(b), is not required to be re-examined when changing residence and station location to within a regular examination area, nor when a new examination location is established within 175 miles airline distance from such licensee's residence and station location.

[30 F.R. 1944, Feb. 11, 1965; 32 F.R. 6143, Apr. 19, 1967; 33 F.R. 7153, May 15, 1968]



## STATION LICENSES

## § 97.37 General eligibility for station license.

An amateur radio station license will be issued only to a licensed amateur radio operator, except that a military recreation station license may also be issued to an individual not licensed as an amateur radio operator (other than a representative of a foreign government), who is in charge of a proposed military recreation station not operated by the U.S. Government but which is to be located in approved public quarters.

[40 FR 5367, Feb. 5, 1975]

## § 97.39 Eligibility of corporations or organizations to hold station license.

An amateur station license will not be issued to a school, company, corporation, association, or other organization, except that in the case of a bona fide amateur radio organization or society, a station license may be issued to a licensed amateur operator, other than the holder of a Novice Class license, as trustee for such society.

[37 FR 21998, Oct. 18, 1972]

## § 97.40 Station license required.

(a) No transmitting station shall be operated in the amateur radio service without being licensed by the Federal Communications Commission.

(b) Every amateur radio operator must have a primary amateur radio station license.

(c) An amateur radio operator may be issued one or more additional station licenses, each for a different land location, except that repeater station, control station, auxiliary link station, and special event station licenses may be issued to an amateur radio operator for land locations where another station license had been issued to the applicant.

(d) Any transmitter to be operated as part of a control link shall be licensed as a control station or as an auxiliary link station and may be combined with a primary, secondary, or club station license at the same location.

(e) A transmitter may only be operated as a repeater station under the authority of a repeater station license.

[37 FR 18544, Sept. 13, 1972, as amended at 40 FR 17756, Apr. 22, 1975]

## § 97.41 Application for station license.

(a) Each application for a club or military recreation station license in the

Amateur Radio Service shall be made on the FCC Form 610-B. Each application for any other amateur radio license, except a special event station, shall be made on the FCC Form 610.

(b) Each application shall state whether the proposed station is a primary or additional station. If the latter, the application shall also state whether the proposed station is a secondary, control, auxiliary link, or repeater station.

(c) When an application(s) is made for a station having one or more associated stations, i.e., control station and/or auxiliary link station, a system network diagram shall also be submitted.

(d) Each application to license a remotely controlled amateur radio station, whether by wire or by radio control, shall be accompanied by a statement giving the address for each control point. The application shall include a functional block diagram and a technical explanation sufficient to describe the operation of the control link. Additionally, the following shall be provided:

(1) Description of the measures proposed for protection against access to the remote station by unauthorized persons.

(2) Description of the measures proposed for protection against unauthorized station operation, either through activation of the control link or otherwise.

(3) Description of the provisions for shutting down the station in case of control link malfunction.

(4) Description of the means to be provided for monitoring the transmitting frequencies.

(5) Photocopies of control station license(s) and auxiliary link station license(s), or the application(s) for same if such stations are proposed for the system network.

(e) Each application to license a control station or an auxiliary link station in the amateur radio service must be accompanied by the following information:

(1) The station transmitting band(s).

(2) Description of the means to be provided for monitoring the transmitting frequencies.

(3) The transmitter power input and justification that such power is in compliance with § 97.67(b).

(4) If remote control of an auxiliary link station is proposed, all of the information required by paragraph (d) of this section shall also be provided.



(f) An application by letter to the Amateur and Citizens Division, Federal Communications Commission, Washington, D.C. 20554, may be made by an Advanced Class or Amateur Extra Class licensee for a license to operate one special event station for the period of the celebration, but not to exceed 30 days unless extraordinary circumstances are shown. The application shall contain the following:

(1) The name, mailing address, photocopy of amateur operator license, and signature of applicant.

(2) The name and description of the celebration, its significance to the public or to amateur radio operators, and the justification for the proposed special event station.

(3) The location of the proposed station.

(4) The dates the station will be operated, and justification.

(5) Specific call sign requested, if desired.

(g) One application and all papers incorporated therein and made a part thereof shall be submitted for each amateur station license. If the application is only for a station license, other than a special event station, it shall be filed directly with the Commission at its Gettysburg, Pennsylvania office. If the application also contains application for any class of amateur operator license, it shall be filed in accordance with the provisions of § 97.11.

(h) Applicants proposing to construct a radio station on a site located on land under the jurisdiction of the U.S. Forest Service, U.S. Department of Agriculture, or the Bureau of Land Management, U.S. Department of the Interior, must supply the information and must follow the procedure prescribed by § 1.70 of this chapter.

(i) Each applicant in the Safety and Special Radio Services (1) for modification of a station license involving a site change or a substantial increase in tower height or (2) for a license for a new station must, before commencing construction, supply the environmental information, where required, and must follow the procedure prescribed by Subpart I of Part 1 of this chapter (§§ 1.1301 through 1.1319) unless Commission action au-

thorizing such construction would be a minor action with the meaning of Subpart I of Part 1.

[28 F.R. 14185, Dec. 21, 1963, as amended at 32 F.R. 2891, Feb. 15, 1967; 37 F.R. 18544, Sept. 13, 1972; 40 F.R. 2988, Jan. 17, 1975; 40 F.R. 17756, Apr. 22, 1975]

#### § 97.42 Mailing address furnished by licensee.

Each application shall set forth and each licensee shall furnish the Commission with an address in the United States to be used by the Commission in serving documents or directing correspondence to that licensee. Unless any licensee advises the Commission to the contrary, the address contained in the licensee's most recent application will be used by the Commission for this purpose.

[40 F.R. 5368, Feb. 5, 1975]

#### § 97.43 Location of station.

Every amateur station must have one land location, the address of which is designated on the station license. Every amateur radio station must have at least one control point. If the control point location is not the same as the station location, authority to operate the station by remote control is required.

[37 F.R. 18545, Sept. 13, 1972]

#### § 97.45 Limitations on antenna structures.

(a) Except as provided in paragraph (b) of this section, an antenna for a station in the Amateur Radio Service which exceeds the following height limitations may not be erected or used unless notice has been filed with both the FAA on FAA Form 7460-1 and with the Commission on Form 714 or on the license application form, and prior approval by the Commission has been obtained for:

(1) Any construction or alteration of more than 200 feet in height above ground level at its site (§ 17.7(a) of this chapter).

(2) Any construction or alteration of greater height than an imaginary surface extending outward and upward at one of the following slopes (§ 17.7(b) of this chapter):

(i) 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport with

at least one runway more than 3,200 feet in length, excluding heliports and sea-plane bases without specified boundaries, if that airport is either listed in the Airport Directory of the current Airman's Information Manual or is operated by a Federal military agency.

(ii) 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport with its longest runway no more than 3,200 feet in length, excluding heliports and sea-plane bases without specified boundaries, if that airport is either listed in the Airport Directory or is operated by a Federal military agency.

(iii) 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport listed in the Airport Directory or operated by a Federal military agency.

(3) Any construction or alteration on an airport listed in the Airport Directory of the Airman's Information Manual (§ 17.7(c) of this chapter).

(b) A notification to the Federal Aviation Administration is not required for any of the following construction or alteration:

(1) Any object that would be shielded by existing structures of a permanent and substantial character or by natural terrain or topographic features of equal or greater height, and would be located in the congested area of a city, town, or settlement where it is evident beyond all reasonable doubt that the structure so shielded will not adversely affect safety in air navigation. Applicants claiming such exemption shall submit a statement with their application to the Commission explaining the basis in detail for their finding (§ 17.14(a) of this chapter).

(2) Any antenna structure of 20 feet or less in height except one that would increase the height of another antenna structure (§ 17.14(b) of this chapter).

(c) Further details as to whether an aeronautical study and/or obstruction marking and lighting may be required, and specifications for obstruction marking and lighting when required, may be obtained from Part 17 of this chapter, "Construction, Marking, and Lighting of Antenna Structures." Information regarding the inspection and maintenance

of antenna structures requiring obstruction marking and lighting is also contained in Part 17 of this chapter.

[34 F.R. 18307, Nov. 15, 1969]

#### § 97.47 Renewal and/or modification of amateur station license.

(a) Application for renewal and/or modification of an individual station license shall be submitted on FCC Form 610, and application for renewal and/or modification of an amateur club or military recreation station shall be submitted on FCC Form 610-B. In every case the application shall be accompanied by the applicant's license or photocopy thereof. Applications for renewal of unexpired licenses must be made during the license term and should be filed not later than 60 days prior to the end of the license term. In any case in which the licensee has, in accordance with the provisions of this chapter, made timely and sufficient application for renewal of an unexpired license, no license with reference to any activity of a continuing nature shall expire until such application shall have been finally determined.

(b) If a license is allowed to expire, application for renewal may be made during a period of grace of 1 year after the expiration date. During this 1-year period of grace, an expired license is not valid. A license renewed during the grace period will be dated currently and will not be backdated to the date of expiration. An application for an individual station license shall be submitted on FCC Form 610. An application for an amateur club or military recreation station license shall be submitted on FCC Form 610-B. In every case the application shall be accompanied by the applicant's expired license or a photocopy thereof.

(c) When the name of a licensee is changed (without changes in the ownership, control, or corporate structure), or when the mailing address is changed (without changing the authorized location of the amateur radio station) a formal application for modification of license is not required. However, the licensee shall notify the Commission promptly of these changes. The notice, which may be in letter form, shall contain the name and address of the licensee



as they appear in the Commission's records, the new name and/or address, as the case may be, and the call sign and the class of operator license. The notice shall be sent to Federal Communications Commission, Gettysburg, Pa., 17325, and a copy shall be maintained with the license of each station until a new license is issued.

(d) When an addition to the control point(s) authorized for a remotely controlled station is desired, an application for modification of the remotely controlled station license shall be submitted. Authorized control points may be deleted by letter notification to the Commission.

(e) Should the licensee desire to effect changes to his station which would significantly change the system network diagram or other technical and operational information on file with the Commission, revised showings for the proposed alterations shall be submitted for approval. An application for modification of the station license is not required. [29 F.R. 3230, Mar. 11, 1964, as amended at 31 F.R. 6422, Apr. 28, 1966; 34 F.R. 12219, July 24, 1969; 37 F.R. 18545, Sept. 13, 1972]

NOTE: For the rules governing operation of an amateur station away from the authorized location, see §§ 97.95-97.101.

#### § 97.49 Commission modification of station license.

(a) Whenever the Commission shall determine that public interest, convenience, and necessity would be served, or any treaty ratified by the United States will be more fully complied with, by the modification of any radio station license either for a limited time, or for the duration of the term thereof, it shall issue an order for such licensee to show cause why such license should not be modified.

(b) Such order to show cause shall contain a statement of the grounds and reasons for such proposed modification, and shall specify wherein the said license is required to be modified. It shall require the licensee against whom it is directed to appear at a place and time therein named, in no event to be less than 30 days from the date of receipt of the order, to show cause why the proposed modification should not be made and the order of modification issued.

(c) If the licensee against whom the order to show cause is directed does not appear at the time and place provided in said order, a final order of modification shall issue forthwith.

[28 F.R. 14185, Dec. 21, 1963]

#### CALL SIGNS

##### § 97.51 Assignment of call signs.

(a) The call signs of amateur stations will be assigned systematically by the Commission with the following exceptions:

(1) A specific unassigned call sign may be reassigned to the most recent holder thereof;

(2) A specific unassigned call sign may be assigned to a previous holder if not under license during the past 5 years;

(3) A specific unassigned call sign may be assigned to an amateur organization in memoriam to a deceased member and former holder thereof;

(4) A specific unassigned call sign may be temporarily assigned to a special event station.

(5) One unassigned two-letter call sign (a call sign having two letters following the numeral) may be assigned to a previous holder of a two-letter call sign, the prefix of which consisted of not more than a single letter. Additionally, a two-letter call sign may be assigned to an Amateur Extra Class licensee who submits evidence that he held any amateur radio operator or station license, issued by any agency of the U.S. Government or by any foreign government, 25 years or more prior to the receipt date of an application for such assignment. Applicants for two-letter call signs are not permitted to select a specific assignment except in accordance with subparagraphs (1) and (2) of this paragraph.

(b) An amateur call sign will consist of a sequence of one or two letters, a numeral designating the call sign area, and not more than three letters: The call sign areas are as follows:

No.

1. Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut.
2. New York, New Jersey.
3. Pennsylvania, Delaware, Maryland, District of Columbia.



4. Virginia, North and South Carolina, Georgia, Florida, Alabama, Tennessee, Kentucky, Puerto Rico and Virgin Islands.
  5. Mississippi, Louisiana, Arkansas, Oklahoma, Texas, New Mexico.
  6. California, Hawaii and Pacific possessions except those included in area 7.
  7. Oregon, Washington, Idaho, Montana, Wyoming, Arizona, Nevada, Utah, Alaska and adjacent islands.
  8. Michigan, Ohio, West Virginia.
  9. Wisconsin, Illinois, Indiana.
  10. Colorado, Nebraska, North and South Dakota, Kansas, Minnesota, Iowa, Missouri.
- [28 FR 14186, Dec. 21, 1963, as amended at 35 FR 3118, Feb. 18, 1970; 40 FR 12991, Mar. 24, 1975; 40 FR 17756 Apr. 22, 1975]

#### § 97.53 Policies and procedures applicable to assignment of call signs.

(a) The following are regarded as preferred call signs:

(1) Two-letter call signs—call signs with a single letter prefix (two-letter prefix in Alaska, Hawaii, and in the U.S. possessions) and a two-letter suffix; e.g. W6AB (KH6AB).

(2) Three-letter call signs—call signs with a single letter prefix and a three-letter suffix; e.g. W6ABC.

(b) An eligible licensee will be permitted to hold only one two-letter call sign. However, a licensee who, by reason of former rule provisions, presently holds more than one such call sign may continue to hold those call signs in the same call sign areas.

(c) Subject to availability, two-letter call signs beginning with the letter "W" will normally be assigned in each call sign area to eligible licensees.

(d) An eligible licensee who holds one or more three-letter call signs must relinquish one of those call signs in order to be assigned a two-letter call sign.

(e) New additional stations will not be assigned a preferred call sign.

(f) An additional station which is presently assigned a preferred call sign will be issued a nonpreferred call sign upon modification of license to show a station location in a different call sign area.

(g) Subject to availability, a basic station will be issued the same type of call sign as the one relinquished upon modification of license to show a station location in a different call sign area.

(1) Licensees will not be assigned specific call signs of their choice or counterpart call signs (call signs with identical suffix letters) under this provision.

(2) When a two-letter call sign is not available in the new call sign area, an eligible licensee may be assigned an available unspecified three-letter call sign.

(h) Call signs which have been unassigned for more than one year are normally available for reassignment.

[33 F.R. 4466, Mar. 13, 1968]

#### DUPLICATE LICENSES AND LICENSE TERM

##### § 97.57 Duplicate license.

Any licensee requesting a duplicate license to replace an original which has been lost, mutilated, or destroyed, shall submit a statement setting forth the facts regarding the manner in which the original license was lost, mutilated, or destroyed. If, subsequent to receipt by the licensee of the duplicate license, the original license is found, either the duplicate or the original license shall be returned immediately to the Commission.

[28 F.R. 14186, Dec. 21, 1963]

##### § 97.59 License term.

(a) Amateur operator licenses are normally valid for a period of 5 years from the date of issuance of a new or renewed license, except the Novice Class which is normally valid for a period of 2 years from the date of issuance.

(b) The license for an amateur station is normally valid for a period of 5 years from the date of issuance of a new or renewed license, except that an amateur station license issued to the holder of a Novice Class amateur operator license is normally valid for a period of 2 years from the date of issuance. All amateur station licenses, regardless of when issued, will expire on the same date as the licensee's amateur operator license.

(c) A duplicate license or a modified license which is not being renewed shall bear the same expiration date as the license for which it is a modification or duplicate.

[28 FR 14186, Dec. 21, 1963, as amended at 32 FR 12685, Sept. 1, 1967; 35 FR 6866, Apr. 30, 1970]

### Subpart C—Technical Standards

SOURCE: The provisions of this Subpart C appear at 28 F.R. 14186, Dec. 21, 1963, unless otherwise noted.

#### § 97.61 Authorized frequencies and emissions.

(a) Following are the frequency bands and associated emissions available to amateur radio stations, other than repeater stations, subject to the limitations stated in paragraph (b) of this section, §§ 97.65, 97.109, and 97.110.

Frequency band	Emissions	Limitations (see paragraph (b))
<b>kHz</b>		
1800-2000	A1, A3	1, 2
3500-4000	A1	
3500-3775	F1	
3775-3890	A5, F5	
3775-4000	A3, F3	4
4383.8	A3J/A3A	13
7000-7300	A1	3, 4
7000-7150	F1	3, 4
7075-7100	A3, F3	11
7150-7225	A5, F5	3, 4
7150-7300	A3, F3	3, 4
14000-14350	A1	
14000-14200	F1	
14200-14275	A5, F5	
14200-14350	A3, F3	
<b>MHz</b>		
21.000-21.450	A1	
21.000-21.250	F1	
21.250-21.350	A5, F5	
21.250-21.450	A3, F3	
28.000-29.700	A1	
28.000-28.500	F1	
28.500-29.700	A3, F3, A5, F5	
50.0-54.0	A1	
50.1-54.0	A2, A3, A4, A5, F1, F3, F5	
51.0-54.0	A8	
144-148	A1	
144.1-148.0	A8, A2, A3, A4, A5, F8, F1, F2, F3, F5	
220-255	A8, A1, A2, A3, A4, A5, F8, F1, F2, F3, F4, F5	5, 6
420-450	A8, A1, A2, A3, A4, A5, F8, F1, F2, F3, F4, F5	5, 7

Frequency band	Emissions	Limitations (see paragraph (b))
<b>kHz</b>		
1215-1300	A8, A1, A2, A3, A4, A5, F8, F1, F2, F3, F4, F5	5
2300-2450	A8, A1, A2, A3, A4, A5, F8, F1, F2, F3, F4, F5, P	5, 8
3300-3500	A8, A1, A2, A3, A4, A5, F8, F1, F2, F3, F4, F5, P	5, 12
5650-5925	A8, A1, A2, A3, A4, A5, F8, F1, F2, F3, F4, F5, P	5, 9
<b>GHz</b>		
10.000-10.500	A8, A1, A2, A3, A4, A5, F8, F1, F2, F3, F4, F5	5
24.000-24.250	A8, A1, A2, A3, A4, A5, F8, F1, F2, F3, F4, F5, P	5, 10
48.000-50.000	A8, A1, A2, A3, A4, A5, F8, F1, F2, F3, F4, F5, P	
71.000-84.000	A8, A1, A2, A3, A4, A5, F8, F1, F2, F3, F4, F5, P	
152.00-170.00	A8, A1, A2, A3, A4, A5, F8, F1, F2, F3, F4, F5, P	
200.00-220.00	A8, A1, A2, A3, A4, A5, F8, F1, F2, F3, F4, F5, P	
240.00-250.00	A8, A1, A2, A3, A4, A5, F8, F1, F2, F3, F4, F5, P	
Above 275.00	A8, A1, A2, A3, A4, A5, F8, F1, F2, F3, F4, F5, P	

#### (b) Limitations:

(1) The use of frequencies in this band is on a shared basis with the LORAN A radionavigation system and is subject to cancellation or revision, in whole or in part, by order of the Commission, without hearing, whenever the Commission shall determine such action is necessary in view of the priority of the LORAN A radio-navigation system. The use of these frequencies by amateur stations shall not view of the priority of the LORAN A system. If an amateur station causes such interference, operation on the frequencies involved must cease if so directed by the Commission.

(2) Operation shall be limited to:

Area	Maximum DC plate input power in watts							
	1800-1825 kHz	1825-1850 kHz	1850-1875 kHz	1875-1900 kHz	1900-1925 kHz	1925-1950 kHz	1950-1975 kHz	1975-2000 kHz
	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night	Day/Night
Alabama	500/100	100/25	0	0	0	0	100/25	500/100
Alaska	1000/200	500/100	500/100	100/25	0	0	0	0
Arizona	1000/200	500/100	500/100	0	0	0	0	0
Arkansas	1000/200	500/100	100/25	0	0	100/25	100/25	500/100
California	1000/200	500/100	500/100	100/25	0	0	0	0
Colorado	1000/200	500/100	200/50	0	0	0	0	200/50
Connecticut	500/100	100/25	0	0	0	0	0	0
Delaware	500/100	100/25	0	0	0	0	0	100/25
District of Columbia	500/100	100/25	0	0	0	0	0	100/25
Florida	500/100	100/25	0	0	0	0	100/25	500/100
Georgia	500/100	100/25	0	0	0	0	0	200/50
Hawaii	0	0	0	0	200/50	100/25	100/25	500/100
Idaho	1000/200	500/100	500/100	100/25	100/25	100/25	100/25	500/100
Illinois	1000/200	500/100	100/25	0	0	0	0	200/50
Indiana	1000/200	500/100	100/25	0	0	0	0	200/50
Iowa	1000/200	500/100	200/50	0	0	100/25	100/25	500/100
Kansas	1000/200	500/100	100/25	0	0	100/25	100/25	500/100
Kentucky	1000/200	500/100	100/25	0	0	0	0	200/50

Area	Maximum DC plate input power in watts							
	1800-1825 kHz	1825-1850 kHz	1850-1875 kHz	1875-1900 kHz	1900-1925 kHz	1925-1950 kHz	1950-1975 kHz	1975-2000 kHz
	Day/ Night	Day/ Night	Day/ Night	Day/ Night	Day/ Night	Day/ Night	Day/ Night	Day/ Night
Louisiana.....	500/100	100/25	0	0	0	0	100/25	500/100
Maine.....	500/100	100/25	0	0	0	0	0	0
Maryland.....	500/100	100/25	0	0	0	0	0	100/25
Massachusetts.....	500/100	100/25	0	0	0	0	0	0
Michigan.....	1000/200	500/100	100/25	0	0	0	0	100/25
Minnesota.....	1000/200	500/100	500/100	100/25	100/25	100/25	100/25	500/100
Mississippi.....	500/100	100/25	0	0	0	0	100/25	500/100
Missouri.....	1000/200	500/100	100/25	0	0	100/25	100/25	500/100
Montana.....	1000/200	500/100	500/100	100/25	100/25	100/25	100/25	500/100
Nebraska.....	1000/200	500/100	200/50	0	0	100/25	100/25	500/100
Nevada.....	1000/200	500/100	500/100	100/25	0	0	0	0
New Hampshire.....	500/100	100/25	0	0	0	0	0	0
New Jersey.....	500/100	100/25	0	0	0	0	0	0
New Mexico.....	1000/200	500/100	100/25	0	0	100/25	500/100	1000/200
New York.....	500/100	100/25	0	0	0	0	0	0
North Carolina.....	500/100	100/25	0	0	0	0	0	100/25
North Dakota.....	1000/200	500/100	500/100	100/25	100/25	100/25	100/25	500/100
Ohio.....	1000/200	500/100	100/25	0	0	0	0	100/25
Oklahoma.....	1000/200	500/100	100/25	0	0	100/25	100/25	500/100
Oregon.....	1000/200	500/100	500/100	100/25	0	0	0	0
Pennsylvania.....	500/100	100/25	0	0	0	0	0	0
Rhode Island.....	500/100	100/25	0	0	0	0	0	0
South Carolina.....	500/100	100/25	0	0	0	0	0	200/50
South Dakota.....	1000/200	500/100	500/100	100/25	100/25	100/25	100/25	500/100
Tennessee.....	1000/200	500/100	100/25	0	0	0	0	200/50
Texas.....	500/100	100/25	0	0	0	0	0	200/50
Utah.....	1000/200	500/100	500/100	100/25	100/25	0	0	100/25
Vermont.....	500/100	100/25	0	0	0	0	0	0
Virginia.....	500/100	100/25	0	0	0	0	0	100/25
Washington.....	1000/200	500/100	500/100	100/25	0	0	0	0
West Virginia.....	1000/200	500/100	100/25	0	0	0	0	100/25
Wisconsin.....	1000/200	500/100	200/50	0	0	0	0	200/50
Wyoming.....	1000/200	500/100	500/100	100/25	100/25	0	0	200/50
Puerto Rico.....	500/100	100/25	0	0	0	0	0	200/50
Virgin Islands.....	500/100	100/25	0	0	0	0	0	200/50
Swan Island.....	500/100	100/25	0	0	0	0	100/25	500/100
Serrana Bank.....	500/100	100/25	0	0	0	0	100/25	500/100
Roncador Key.....	500/100	100/25	0	0	0	0	100/25	500/100
Navassa Island.....	500/100	100/25	0	0	0	0	0	200/50
Baker, Canton, Enderbury, Howland.....	100/25	0	0	100/25	100/25	0	0	100/25
Guam, Johnston, Midway.....	0	0	0	0	100/25	0	0	100/25
American Samoa.....	200/50	0	0	200/50	200/50	0	0	200/50
Wake.....	100/25	0	0	100/25	0	0	0	0
Palmyra, Jarvis.....	0	0	0	0	200/50	0	0	200/50

(3) Where, in adjacent regions or subregions, a band of frequencies is allocated to different services of the same category, the basic principle is the equality of right to operate. Accordingly, the stations of each service in one region or subregion must operate so as not to cause harmful interference to services in the other regions or subregions (No. 117, the Radio Regulations, Geneva, 1959).

(4) 3900-4000 kHz and 7100-7300 kHz are not available in the following U.S. possessions: Baker, Canton, Enderbury, Guam, Howland, Jarvis, Palmyra, American Samoa, and Wake Islands.

(5) Amateur stations shall not cause interference to the Government radio-location service.

(6) Not available in those portions of Texas and New Mexico bounded by latitude 33°24' N., and 31°53' N., and longi-

tude 105°40' W. and 106°40' W. between the hours 0500 and 1800 local time, Monday through Friday, except to stations authorized to operate in an organized civil defense network when civil defense emergencies exist or when arrangements have been made with the Commission Engineer in Charge at Dallas, Tex., and the Area Frequency Coordinator at White Sands, N. Mex., for drills at specific dates and times.

(7) In the following areas the d.c. plate input power to the final transmitter stage shall not exceed 50 watts, except when authorized by the appropriate Commission Engineer in Charge and the appropriate Military Area Frequency Coordinator.

(1) Those portions of Texas and New Mexico bounded by latitude 33°24' N.,



31°53' N., and longitude 105°40' W. and 106°40' W.

(ii) The State of Florida, including the Key West area and the areas enclosed within circles of 200-mile radius centered at 28°21' N., 80°43' W. and 30°30' N., 86°30' W.

(iii) The State of Arizona.

(iv) Those portions of California and Nevada south of latitude 37°10' N. and the area within a 200-mile radius of 34°09' N., 119°11' W.

(8) No protection in the band 2400–2500 MHz is afforded from interference due to the operation of industrial, scientific, and medical devices on 2450 MHz.

(9) No protection in the band 5725–5875 MHz is afforded from interference due to the operation of industrial, scientific and medical devices on 5800 MHz.

(10) No protection in the band 24.00–24.25 GHz is afforded from interference due to the operation of industrial, scientific and medical devices on 24.125 GHz.

(11) The use of A3 and F3 in this band is limited to amateur radio stations located outside Region 2.

(12) Amateur stations shall not cause interference to the Fixed-Satellite Service operating in the band 3400–3500 MHz.

(13) The frequency 4383.8 kHz, maximum power 150 watts, may be used by any station authorized under this part to communicate with any other station authorized in the State of Alaska for emergency communications. No airborne operations will be permitted on this frequency. Additionally, all stations operating on this frequency must be located in or within 50 nautical miles of the State of Alaska.

[83 F.R. 10642, July 26, 1968, as amended at 35 F.R. 1107, Jan. 28, 1970; 35 F.R. 13991, Sept. 3, 1970; 86 F.R. 4265, Mar. 4, 1971; 36 F.R. 6423, Apr. 3, 1971; 37 F.R. 6593, Mar. 31, 1972; 37 F.R. 18545, Sept. 13, 1972; 37 F.R. 21327, Oct. 7, 1972; 39 F.R. 12995, Apr. 10, 1974; 39 F.R. 44985, Dec. 30, 1974]

# § 97.63 Individual frequency not specified.

Transmissions by an amateur station may be on any frequency within any authorized amateur band. Sideband frequencies resulting from keying or modulating a carrier wave shall be confined within the authorized amateur band.

## § 97.65 Emission limitations.

(a) Type A9 emission, where not specifically designated in the bands listed in § 97.61, may be used for short periods of

time when required for authorized remote control purposes or for experimental purposes. However, these limitations do not apply where type A9 emission is specifically designated.

(b) Whenever code practice, in accordance with § 97.91(d), is conducted in bands authorized for A3 emission, tone modulation of the radiotelephone transmitter may be utilized when interspersed with appropriate voice instructions.

(c) On frequencies below 29.0 MHz and between 50.1 and 52.5 MHz, the bandwidth of an F3 emission (frequency or phase modulation) shall not exceed that of an A3 emission having the same audio characteristics; and the purity and stability of emissions shall comply with the requirements of § 97.73.

(d) On frequencies below 50 MHz, the bandwidth of A5 and F5 emissions shall not exceed that of an A3 single sideband emission.

(e) On frequencies between 50 MHz and 225 MHz, single sideband or double sideband A5 emission may be used and the bandwidth shall not exceed that of an A3 single sideband or double sideband signal respectively. The bandwidth of F5 emission shall not exceed that of an A3 single sideband emission.

(f) Below 225 MHz, A3 and A5 emissions may be used simultaneously on the same carrier frequency provided the total bandwidth does not exceed that of an A3 double sideband emission.

[28 F.R. 14186, Dec. 21, 1963, as amended at 33 F.R. 10644, July 26, 1968; 37 F.R. 6593, Mar. 31, 1972]

## § 97.67 Maximum authorized power.

(a) Except for power restrictions as set forth in § 97.61, each amateur transmitter may be operated with a power input not exceeding 1 kilowatt to the plate circuit of the final amplifier stage of an amplifier-oscillator transmitter or to the plate circuit of an oscillator transmitter. An amateur transmitter operating with a power input exceeding 900 watts to the plate circuit shall provide means for accurately measuring the plate power input to the vacuum tube or tubes supplying power to the antenna.

(b) Notwithstanding the provisions of paragraph (a) of this section, amateur stations shall use the minimum amount of transmitter power necessary to carry out the desired communications.

(c) Within the limitations of paragraphs (a) and (b) of this section, the

effective radiated power of a repeater station shall not exceed that specified for the antenna height above average terrain in the following table:

Antenna height above average terrain	Maximum effective radiated power for frequency bands above:			
	52 MHz	146 MHz	442 MHz	1215 MHz
Below 50 feet.....	100 watts.....	800 watts.....	Paragraphs (a) and (b).....	.....
50 to 99 feet.....	100 watts.....	400 watts.....	do.....	.....
100 to 499 feet.....	50 watts.....	400 watts.....	800 watts.....	Paragraphs (a) and (b).....
500 to 999 feet.....	25 watts.....	200 watts.....	800 watts.....	Do.....
Above 1,000 feet.....	25 watts.....	100 watts.....	400 watts.....	Do.....

[21 F.R. 14186, Dec. 21, 1963, as amended at 37 F.R. 18545, Sept. 13, 1972]

#### § 97.69 Radio teleprinter transmissions.

The following special conditions shall be observed during the transmission of radio teleprinter signals on authorized frequencies by amateur stations:

(a) A single channel five-unit (start-stop) teleprinter code shall be used which shall correspond to the International Telegraphic Alphabet No. 2 with respect to all letters and numerals (including the slant sign or fraction bar) but special signals may be employed for the remote control of receiving printers, or for other purposes, in "figures" positions not utilized for numerals. In general, this code shall conform as nearly as possible to the teleprinter code or codes in common commercial usage in the United States.

(b) The normal transmitting speed of the radio teleprinter signal keying equipment shall be adjusted as closely as possible to one of the standard teleprinter speeds, namely, 60 (45 bauds), 67 (50 bauds), 75 (56.25 bauds) or 100 (75 bauds) words per minute, and in any event, within the range of plus or minus five words per minute of the selected standard speed.

(c) When frequency shift keying (type F1 emission) is utilized, the deviation in frequency from the mark signal to space signal, or from the space signal to the mark signal, shall be less than 900 Hertz.

(d) When audio frequency shift keying (type A2 or type F2 emission) is utilized, the highest fundamental modulating audio frequency shall not exceed 3000 Hertz, and the difference between the modulating audio frequency for the mark signal and that for the space signal shall be less than 900 Hertz.

[28 F.R. 14186, Dec. 21, 1963, as amended at 36 F.R. 23299, Dec. 8, 1971]

#### § 97.71 Transmitter power supply.

The licensee of an amateur station using frequencies below 144 megahertz

shall use adequately filtered direct-current plate power supply for the transmitting equipment to minimize modulation from this source.

#### § 97.73 Purity and stability of emissions.

Spurious radiation from an amateur station being operated with a carrier frequency below 144 megahertz shall be reduced or eliminated in accordance with good engineering practice. This spurious radiation shall not be of sufficient intensity to cause interference in receiving equipment of good engineering design including adequate selectivity characteristics, which is tuned to a frequency or frequencies outside the frequency band of emission normally required for the type of emission being employed by the amateur station. In the case of A3 emission, the amateur transmitter shall not be modulated to the extent that interfering spurious radiation occurs, and in no case shall the emitted carrier wave be amplitude-modulated in excess of 100 percent. Means shall be employed to insure that the transmitter is not modulated in excess of its modulation capability for proper technical operation. For the purposes of this section a spurious radiation is any radiation from a transmitter which is outside the frequency band of emission normal for the type of transmission employed, including any component whose frequency is an integral multiple or submultiple of the carrier frequency (harmonics and subharmonics), spurious modulation products, key clicks, and other transient effects, and parasitic oscillations. When using amplitude modulation on frequencies below 144 megahertz, simultaneous frequency modulation is not permitted and when using frequency modulation on frequencies below 144 megahertz simultaneous amplitude modulation is not permitted. The frequency of the emitted



carrier wave shall be as constant as the state of the art permits.

**§ 97.75 Frequency measurement and regular check.**

The licensee of an amateur station shall provide for measurement of the emitted carrier frequency or frequencies and shall establish procedure for making such measurement regularly. The measurement of the emitted carrier frequency or frequencies shall be made by means independent of the means used to control the radio frequency or frequencies generated by the transmitting apparatus and shall be of sufficient accuracy to assure operation within the amateur frequency band used.

**Subpart D—Operating Requirements and Procedures**

**SOURCE:** The provisions of this Subpart D appear at 28 P.R. 14188, Dec. 21, 1963, unless otherwise noted.

**GENERAL**

**§ 97.77 Practice to be observed by all licensees.**

In all respects not specifically covered by these regulations each amateur station shall be operated in accordance with good engineering and good amateur practice.

**§ 97.79 Control operator requirements.**

(a) The licensee of an amateur station shall be responsible for its proper operation.

(b) Every amateur radio station, when in operation, shall have a control operator at an authorized control point. The control operator shall be on duty, except where the station is operated under automatic control. The control operator may be the station licensee, if a licensed amateur radio operator, or may be another amateur radio operator with the required class of license and designated by the station licensee. The control operator shall also be responsible, together with the station licensee, for the proper operation of the station.

(c) An amateur station may only be operated in the manner and to the extent permitted by the operator privileges authorized for the class of license held by the control operator, but may exceed those of the station licensee provided proper station identification procedures are performed.

(d) The licensee of an amateur radio station may permit any third party to

participate in amateur radio communication from his station: *Provided*, That a control operator is present and continuously monitors and supervises the radiocommunication to insure compliance with the rules.

[37 FR 18545, Sept. 13, 1972, as amended at 37 FR 21998, Oct. 18, 1972; 40 FR 26525, June 24, 1975]

**§ 97.81 Authorized apparatus.**

An amateur station license authorizes the use under control of the licensee of all transmitting apparatus at the fixed location specified in the station license which is operated on any frequency, or frequencies allocated to the amateur service, and in addition authorizes the use, under control of the licensee, of portable and mobile transmitting apparatus operated at other locations.

**§ 97.83 Availability of operator license.**

The original operator license of each operator shall be kept in the personal possession of the operator while operating an amateur station. When operating an amateur station at a fixed location, however, the license may be posted in a conspicuous place in the room occupied by the operator. The license shall be available for inspection by any authorized Government official whenever the operator is operating an amateur station and at other times upon request made by an authorized representative of the Commission, except when such license has been filed with application for modification or renewal thereof, or has been mutilated, lost or destroyed, and request has been made for a duplicate license in accordance with § 97.57. No recognition shall be accorded to any photocopy of an operator license; however, nothing in this section shall be construed to prohibit the photocopying for other purposes of any amateur radio operator license.

**§ 97.85 Availability of station license.**

The original license of each amateur station or a photocopy thereof shall be posted in a conspicuous place in the room occupied by the licensed operator while the station is being operated at a fixed location or shall be kept in his personal possession. When the station is operated at other than a fixed location, the original station license or a photocopy thereof shall be kept in the personal possession of the station licensee (or a licensed representative) who shall be



present at the station while it is being operated as a portable or mobile station. The original station license shall be available for inspection by any authorized Government official at all times while the station is being operated and at other times upon request made by an authorized representative of the Commission, except when such license has been filed with application for modification or renewal thereof, or has been mutilated, lost, or destroyed, and request has been made for a duplicate license in accordance with § 97.57.

#### § 97.87 Station identification.

(a) An amateur station shall be identified by the transmission of its call sign at the beginning and end of each single transmission or exchange of transmissions and at intervals not to exceed ten minutes during any single transmission or exchange of transmissions of more than 10 minutes duration. Additionally, at the end of an exchange of telegraphy (other than teleprinter) or telephony transmissions between amateur stations, the call sign (or the generally accepted network identifier) shall be given for the station, or for at least one of the group of stations, with which communication was established.

(b) When an amateur station is operated as a portable or mobile station, the operator shall give the following additional identification at the end of each single transmission or exchange of transmissions:

(1) When identifying by telegraphy, immediately after the call sign, transmit the fraction-bar DN followed by the number of the call sign area in which the station is being operated.

(2) When identifying by telephony, immediately after the call sign, transmit the word "portable" or "mobile", as appropriate, followed by the number of the call sign area in which the station is being operated.

(c) When an amateur station is operated outside of the 10 call sign areas prescribed in § 97.51(b) and outside of the jurisdiction of a foreign government, the operator shall give the following additional identification at the end of each single transmission or exchange of transmissions:

(1) When identifying by telegraphy, immediately after the call sign, transmit the fraction-bar DN followed by the designator R 1, R 2, or R 3, to show the region (as defined by the International

Radio Regulations, Geneva, 1959) in which the station is being operated.

(2) When identifying by telephony, immediately after the call sign, transmit the word "mobile" followed by the designator Region 1, Region 2, or Region 3, to show the region (as defined by the International Radio Regulations, Geneva, 1959) in which the station is being operated.

(d) Under conditions when the control operator is other than the station licensee, the station identification shall be the assigned call sign for that station. However, when a station is operated within the privileges of the operator's class of license but which exceeds those of the station licensee, station identification shall be made by following the station call sign with the operator's primary station call sign (i.e. WN4XYZ/W4XX).

(e) A repeater station shall be identified by radiotelephony or by radiotelegraphy when in service at intervals not to exceed 5 minutes at a level of modulation sufficient to be intelligible through the repeated transmission.

(f) A control station must be identified by its assigned station call sign unless its emissions contain the call sign identification of the remotely controlled station.

(g) An auxiliary link station must be identified by its assigned station call sign unless its emissions contain the call sign of its associated station.

(h) The identification required by paragraphs (a), (b), (c), (d), (e), (f), and (g) of this section shall be given on each frequency being utilized for transmission and shall be transmitted either by telegraphy using the International Morse code, or by telephony, using the English language. If by an automatic device only used for identification by telegraphy, the code speed shall not exceed 20 words per minute. The use of a national or internationally recognized standard phonetic alphabet as an aid for correct telephone identification is encouraged.

[32 F.R. 17430, Dec. 5, 1967, as amended at 37 F.R. 13545, Sept. 13, 1972]

#### § 97.88 Operation of a remotely controlled station.

An amateur radio station may be remotely controlled only from an authorized control point, and only where there is compliance with the following:

(a) The license for the remotely controlled station must list the authorized

remote control point(s). A photocopy of the remotely controlled station license must be posted in a conspicuous place at the authorized control point(s), and at the remotely controlled transmitter location. A copy of the system network diagram on file with the Commission must be retained at each control point. The transmitting antenna, transmission line, or mast, as appropriate, associated with the remotely controlled transmitter must bear a durable tag marked with the station call sign, the name of the station licensee and other information so that the control operator can readily be contacted by Commission personnel.

(b) The control link equipment and the remotely controlled station must be accessible only to persons authorized by the licensee. Protection against both inadvertent and unauthorized deliberate emissions must be provided. In the event unauthorized emissions occur, the station operation must be suspended until such time as adequate protection is incorporated, or until there is reasonable assurance that unauthorized emissions will not recur.

(c) Except for operation under automatic control, as provided by §§ 97.110 (c) and 97.111(g), a control operator designated by the licensee must be present at an authorized control point while the station is being remotely controlled. Immediately prior to, and during the periods the remotely controlled station is in operation, the frequencies used for emission by the remotely controlled transmitter must be continuously monitored by the control operator. The control operator must terminate transmission upon any deviation from the rules.

(d) Provisions must be incorporated to limit transmission to a period of no more than 3 minutes in the event of malfunction in the control link.

(e) A remotely controlled station may not be operated at any location other than that specified on the license without prior approval of the Commission except in emergencies involving the immediate safety of life or protection of property.

(f) A repeater station may be operated by radio remote control only where the

control link utilizes frequencies other than the repeater station receiving frequencies.

[39 FR 21054; June 18, 1974, as amended at 40 FR 26526, June 24, 1975]

#### § 97.89 Points of communications.

(a) Amateur stations may communicate with:

(1) Other amateur stations, excepting those prohibited by Appendix 2.

(2) Stations in other services licensed by the Commission and with U.S. Government stations for civil defense purposes in accordance with Subpart F of this part, in emergencies and, on a temporary basis, for test purposes.

(3) Any station which is authorized by the Commission to communicate with amateur stations.

(b) Amateur stations may be used for transmitting signals, or communications, or energy, to receiving apparatus for the measurement of emissions, temporary observation of transmission phenomena, radio control of remote objects, and similar experimental purposes and for the purposes set forth in § 97.91.

(c) [Reserved]

(d) Control stations and auxiliary link stations may not be used to communicate with any other station than those shown in the system network diagram.

[37 FR 18545, Sept. 13, 1972, as amended at 40 FR 24737, June 10, 1975]

#### § 97.91 One-way communications.

In addition to the experimental one-way transmission permitted by § 97.89, the following kinds of one-way communications, addressed to amateur stations, are authorized and will not be construed as broadcasting: (a) Emergency communications, including bona-fide emergency drill practice transmissions; (b) Information bulletins consisting solely of subject matter having direct interest to the amateur radio service as such; (c) Round-table discussions or net-type operations where more than two amateur stations are in communication, each station taking a turn at transmitting to other station(s) of the group; and (d) Code practice transmissions intended for persons learning or improving proficiency in the International Morse Code.



**§ 97.93 Modulation of carrier.**

Except for brief tests or adjustments an amateur radiotelephone station shall not emit a carrier wave on frequencies below 51 megahertz unless modulated for the purpose of communication. Single audiofrequency tones may be transmitted for test purposes of short duration for the development and perfection of amateur radio telephone equipment.

**STATION OPERATION AWAY FROM AUTHORIZED LOCATION****§ 97.95 Operation away from the authorized fixed operation station location.**

(a) Operation within the United States, its territories, or possessions is permitted as follows:

(1) When there is no change in the authorized fixed operation station location, an amateur radio station other than a military recreation, auxiliary link, or special event station, may be operated under its station license anywhere in the United States, its territories or possessions, as a portable or mobile operation, subject to § 97.61.

(2) When the authorized permanent station location is changed, formal application (FCC Form 610 for an individual station license and FCC Form 610-B for an amateur club or military recreation station license) must be submitted to the Commission prior to any operation and within 4 months of the move for the purpose of modifying the station license to show the new permanent station location. Operation at the new location is permitted under the license for the former station from the date the modification application is mailed until advised of Commission action on that application.

(3) For operations under subparagraphs (1) and (2) of this paragraph, advance notice, as required by § 97.97, must be given to the Engineer in Charge of each radio district in which operation is intended and the portable identification procedures specified in § 97.87 must be used.

(b) When outside the continental limits of the United States, its territories, or possessions, an amateur radio station may be operated as portable or mobile only under the following conditions:

(1) Operation may not be conducted within the jurisdiction of a foreign government except pursuant to, and in accordance with express authority granted to the licensee by such foreign government. When a foreign government permits Commission licensees to operate within its territory, the amateur frequency bands which may be used shall be as prescribed or limited by that government. (See Appendix 4 of this part for the text of treaties or agreements between the United States and foreign governments relative to reciprocal amateur radio operation.)

(2) When outside the jurisdiction of a foreign government, operation may be conducted within Region 2 on any amateur frequency band between 7.0 MHz and 148 MHz, inclusive; and when not within Region 2, operation may be conducted only in the amateur bands 7.0–7.1 MHz, 14.00–14.35 MHz, 21.00–21.45 MHz, and 28.0–29.7 MHz.

**NOTE:** Region 2 is defined as follows: On the east, a line (B) extending from the North Pole along meridian 10° west of Greenwich to its intersection with parallel 72° north; thence by Great Circle Arc to the intersection of meridian 50° west and parallel 40° north; thence by Great Circle Arc to the intersection of meridian 20° west and parallel 10° south; thence along meridian 20° west to the South Pole. On the west, a line (C) extending from the North Pole by Great Circle Arc to the intersection of parallel 65°30' north with the international boundary in Bering Strait; thence by Great Circle Arc to the intersection of meridian 165° east of Greenwich and parallel 50° north; thence by Great Circle Arc to the intersection of meridian 170° west and parallel 10° north; thence along parallel 10° north to its intersection with meridian 120° west; thence along meridian 120° west to the South Pole.

(3) Notice of such operation, in accordance with the provisions of § 97.97, shall be given to the Engineer in Charge of the district having jurisdiction of the authorized fixed transmitter location.

[28 F.R. 14188, Dec. 21, 1963, as amended at 33 F.R. 4467, Mar. 13, 1968; 34 F.R. 12219, July 24, 1969; 34 F.R. 18865, Nov. 26, 1969; 37 F.R. 6593, Mar. 31, 1972; 40 F.R. 17756, Apr. 22, 1975]

**§ 97.97 Notice of operation away from authorized location.**

Whenever an amateur station is, or is likely to be, in portable operation at a

single location for a period exceeding 15 days, the licensee shall give advanced written notice of such operation to the Commission's office specified in § 97.95. A new notice is required whenever there is any change in the particulars of a previous notice or whenever operation away from the authorized station continues for a period in excess of 1 year. The notice required by this section shall contain the following information:

- (a) Name of licensee.
- (b) Station call sign.
- (c) Authorized station location shown on station license.
- (d) Specific geographical location of station when in portable operation.
- (e) Dates of the beginning and end of the portable operation.
- (f) Address at which, or through which, the licensee can be readily reached.

[37 F.R. 18546, Sept. 1972]

#### SPECIAL PROVISIONS<sup>1</sup>

#### § 97.99 Stations used only for radio control of remote model crafts and vehicles.

An amateur transmitter when used for the purpose of transmitting radio signals intended only for the control of a remote model craft or vehicle and having mean output power not exceeding one watt may be operated under the special provisions of this section provided an executed Transmitter Identification Card (FCC Form 452-C) or a plate made of a durable substance indicating the station call sign and licensee's name and address is affixed to the transmitter.

(a) Station identification is not required for transmissions directed only to a remote model craft or vehicle.

(b) Transmissions containing only control signals directed only to a remote model craft or vehicle are not considered to be codes or ciphers in the context of the meaning of § 97.117.

(c) Notice of operation away from authorized location is not required where the portable or mobile operation consists entirely of transmissions directed only to a remote model craft or vehicle.

<sup>1</sup> 38 FR 1506, Jan. 13, 1973.

(d) Station logs need not indicate the times of commencing and terminating each transmission or series of transmissions.

[38 FR 1506, Jan. 13, 1973]

#### § 97.101 Mobile stations aboard ships or aircraft.<sup>1</sup>

In addition to complying with all other applicable rules, an amateur mobile station operated on board a ship or aircraft must comply with all of the following special conditions: (a) The installation and operation of the amateur mobile station shall be approved by the master of the ship or captain of the aircraft; (b) The amateur mobile station shall be separate from and independent of all other radio equipment, if any, installed on board the same ship or aircraft; (c) The electrical installation of the amateur mobile station shall be in accord with the rules applicable to ships or aircraft as promulgated by the appropriate government agency; (d) The operation of the amateur mobile station shall not interfere with the efficient operation of any other radio equipment installed on board the same ship or aircraft; and (e) The amateur mobile station and its associated equipment, either in itself or in its method of operation, shall not constitute a hazard to the safety of life or property.

#### Logs

#### § 97.103 Station log requirements.

An accurate legible account of station operation shall be entered into a log for each amateur radio station. The following items shall be entered as a minimum:

(a) The call sign of the station, the signature of the station licensee, or a photocopy of the station license.

(b) The locations and dates upon which fixed operation of the station was initiated and terminated. If applicable, the location and dates upon which portable operation was initiated and terminated at each location.

(1) The date and time periods the duty control operator for the station was other than the station licensee, and the signature and primary station call sign of that duty control operator.

(2) A notation of third party traffic sent or received, including names of all

<sup>1</sup> 38 FR 1507, Jan. 13, 1973.



third parties, and a brief description of the traffic content. This entry may be in a form other than written, but one which can be readily transcribed by the licensee into written form.

(3) Upon direction of the Commission, additional information as directed shall be recorded in the station log.

[39 FR 24909, July 8, 1974]

#### § 97.105 Retention of logs.

The station log shall be preserved for a period of at least 1 year following the last date of entry and retained in the possession of the licensee. Copies of the log, including the sections required to be transcribed by § 97.103, shall be available to the Commission for inspection. [37 F.R. 18546, Sept. 13, 1972]

### EMERGENCY OPERATIONS

#### § 97.107 Operation in emergencies.

In the event of an emergency disrupting normally available communication facilities in any widespread area or areas, the Commission, in its discretion, may declare that a general state of communications emergency exists, designate the area or areas concerned, and specify the amateur frequency bands, or segments of such bands, for use only by amateurs participating in emergency communication within or with such affected area or areas. Amateurs desiring to request the declaration of such a state of emergency should communicate with the Commission's Engineer in Charge of the area concerned. Whenever such declaration has been made, operation of and with amateur stations in the area concerned shall be only in accordance with the requirements set forth in this section, but such requirements shall in no wise affect other normal amateur communication in the affected area when conducted on frequencies not designated for emergency operation.

(a) All transmissions within all designated amateur communications bands<sup>1</sup>

<sup>1</sup>The frequency 4383.8kHz may be used by any station authorized under this part to communicate with any other station in the State of Alaska for emergency communications. No airborne operations will be permitted on this frequency. Additionally, all stations operating on this frequency must be located in or within 50 nautical miles of the State of Alaska.

other than communications relating directly to relief work, emergency service, or the establishment and maintenance of efficient amateur radio networks for the handling of such communications shall be suspended. Incidental calling, answering, testing or working (including casual conversations, remarks or messages) not pertinent to constructive handling of the emergency situation shall be prohibited within these bands.

(b) The Commission may designate certain amateur stations to assist in the promulgation of information relating to the declaration of a general state of communications emergency, to monitor the designated amateur emergency communications bands, and to warn non-complying stations observed, to be operating in those bands. Such station, when so designated, may transmit for that purpose on any frequency or frequencies authorized to be used by that station, provided such transmissions do not interfere with essential emergency communications in progress; however, such transmissions shall preferably be made on authorized frequencies immediately adjacent to those segments of the amateur bands being cleared for the emergency. Individual transmissions for the purpose of advising other stations of the existence of the communications emergency shall refer to this section by number (§ 97.107) and shall specify, briefly and concisely, the date of the Commission's declaration, the area and nature of the emergency, and the amateur frequency bands or segments of such bands which constitute the amateur emergency communications bands at the time. The designated stations shall not enter into discussions with other stations beyond furnishing essential facts relative to the emergency, or acting as advisors to stations desiring to assist in the emergency, and the operators of such designated stations shall report fully to the Commission the identity of any stations failing to comply, after notice, with any of the pertinent provisions of this section.

(c) The special conditions imposed under the provisions of this section shall cease to apply only after the Commission, or its authorized representative, shall

have declared such general state of communications emergency to be terminated; however, nothing in this paragraph shall be deemed to prevent the Commission from modifying the terms of its declaration from time to time as may be necessary during the period of a communications emergency or from removing those conditions with respect to any amateur frequency band or segment of such band which no longer appears essential to the conduct of the emergency communications.

[28 FR 14188, Dec. 21, 1963, as amended at 39 FR 44985, Dec. 30, 1974]

#### OPERATION OF ADDITIONAL STATIONS

##### § 97.108 [Reserved]

##### § 97.109 Operation of a control station.

(a) Amateur frequency bands above 220 MHz, excepting 435 to 438 MHz, may be used for emissions by a control station. Frequencies below 225 MHz used for control links must be monitored by the control operator immediately prior to, and during, periods of operation.

(b) Where a remotely controlled station has been authorized to be operated from one or more remote control stations, those remote control stations may be operated either mobile or portable.

[37 F.R. 18546, Sept. 13, 1972]

##### § 97.110 Operation of an auxiliary link station.

(a) An auxiliary link station may use amateur frequency bands above 220 MHz, excepting 435 to 438 MHz, for emissions. Except as provided in § 97.110(c), frequencies below 225 MHz used by an auxiliary link station shall be monitored by the control operator immediately prior to, and during, periods of operation.

(b) An auxiliary link station may only be used for fixed operation from the location specified on the station license, and only when its associated station(s) is operated from its authorized land location.

(c) An auxiliary link station licensed either for operation by local control or remote control may also be operated by automatic control when it is licensed as a part of a repeater station system which is being operated under automatic con-

trol. Both the auxiliary link station and the repeater station must appear on the system network diagram on file with the Commission.

[37 FR 18546, Sept. 13, 1972, as amended at 40 FR 26526, June 24, 1975]

##### § 97.111 Operation of a repeater station.

(a) Emissions from a repeater station shall be discontinued within 5 seconds after cessation of radiocommunications by the user station. Provisions to automatically limit the access to a repeater station may be incorporated, but are not mandatory.

(b) Except for automatic control operations as provided in paragraph (g) of this section, the transmitting and receiving frequencies utilized by the repeater station shall be continuously monitored by the control operator immediately prior to, and during, periods of operation.

(c) A repeater station may be concurrently operated on more than one frequency band. Crossband operation of repeater stations is prohibited, i.e., both input (receiving) and output (transmitting) frequencies for a particular repeated transmission must be within the same frequency band. Operation on more than one output frequency on a single frequency band is prohibited except when specifically approved by the Commission. Repeater stations authorized to operate in conjunction with one or more auxiliary link stations may utilize an input frequency in a different frequency band provided the input frequency of the auxiliary link station(s) is in the same frequency band as the output frequency of the repeater station.

(d) A repeater station shall be operated in a manner so as to assure that the station is not used for one-way radiocommunication other than provided for in § 97.91.

(e) A station licensed as a repeater station may only be operated as a repeater station, excepting for short periods for testing or for emergencies.

(f) When in operation, the log of a repeater station must also show the following information for each frequency band in use.

(1) Location of the station transmitting antenna, marked upon a topographic



map having a scale of 1:250,000, and contour intervals.<sup>1</sup>

(2) The transmitting antenna height above average terrain.<sup>2</sup>

(3) The effective radiated power in the horizontal plane for the main lobe of the antenna pattern, calculated for maximum transmitter output power.

(4) The transmitter output power.

(5) The loss in the transmission line between the transmitter and the antenna, expressed in decibels.

(6) The relative gain in the horizontal plane of the transmitting antenna.

(7) The horizontal and vertical radiation patterns of the transmitting antenna, with reference to true north (for horizontal pattern only), expressed as relative field strength (voltage) or in decibels, drawn upon polar coordinate graph paper, and method of determining the patterns.

(g) A repeater station licensed either for local control or for remote control may also be operated under automatic control where:

(1) Devices and procedures have been implemented to assure that compliance with the rules can be accomplished without the duty control operator present at the control point at all times the station is in operation.

(2) All radiocommunications transmitted by the station are monitored by the duty control operator in real-time, or are recorded so that they can be reproduced and reviewed within 72 hours. The recordings shall be preserved for a period of at least 30 days, in the possession of the station licensee, and must be made available to the Commission upon request. However, real-time monitoring, or recording and review of repeater operation is not required when the facility is operated as a closed repeater, i.e., the repeater station employs means to restrict usage to persons specifically authorized by the control operator or station licensee.

(3) Upon notification by the Commission of improper operation of a station

<sup>1</sup>Indexes and ordering information for suitable maps are available from U.S. Geological Survey, Washington, D.C. 20242, or Federal Center, Denver, Colorado 80225.

<sup>2</sup>See Appendix 5.

under automatic control, said operation must be immediately discontinued until all deficiencies have been corrected.

[37 FR 18547, Sept. 13, 1972, as amended at 39 FR 2002, Jan. 16, 1974; 40 FR 26526, June 24, 1975]

### Subpart E—Prohibited Practices and Administrative Sanctions

SOURCE: The provisions of this Subpart E appear at 28 F.R. 14191, Dec. 21, 1963, unless otherwise noted.

#### PROHIBITED TRANSMISSIONS AND PRACTICES

##### § 97.112 No remuneration for use of station.

(a) An amateur station shall not be used to transmit or receive messages for hire, nor for communication for material compensation, direct or indirect, paid or promised.

(b) Control operators of a Club Station may be compensated when the club station is operated primarily for the purpose of conducting amateur radiocommunication to provide telegraphy practice transmissions intended for persons learning or improving proficiency in the International Morse Code, or to disseminate information bulletins consisting solely of subject matter having direct interest to the Amateur Radio Service provided:

(1) The station conducts telegraphy practice and bulletin transmission for at least 40 hours per week;

(2) The station schedules operations on all allocated medium and high frequency amateur bands using reasonable measures to maximize coverage.

(3) The schedule of normal operating times and frequencies is published at least 30 days in advance of the actual transmissions.

Control operators may accept compensation only for such periods of time during which the station is transmitting telegraphy practice or bulletins. A control operator shall not accept any direct or indirect compensation for periods during which the station is transmitting material other than telegraphy practice or bulletins.

[28 F.R. 14191, Dec. 21, 1963. Redesignated at 37 FR 18546, Sept. 13, 1972, and amended at 39 FR 9444, Mar. 11, 1974]

**§ 97.113 Broadcasting prohibited.**

Subject to the provisions of § 97.91, an amateur station shall not be used to engage in any form of broadcasting, that is, the dissemination of radio communications intended to be received by the public directly or by the intermediary of relay stations, nor for the retransmission by automatic means of programs or signals emanating from any class of station other than amateur. The foregoing provision shall not be construed to prohibit amateur operators from giving their consent to the rebroadcast by broadcast stations of the transmissions of their amateur stations: *Provided*, That the transmissions of the amateur stations shall not contain any direct or indirect reference to the rebroadcast.

**§ 97.114 Third party traffic.**

The transmission or delivery of the following amateur radiocommunication is prohibited:

(a) International third party traffic except with countries which have assented thereto;

(b) Third party traffic involving material compensation, either tangible or intangible, direct or indirect, to a third party, a station licensee, a control operator, or any other person.

(c) Except for an emergency communication as defined in this part, third party traffic consisting of business communications on behalf of any party. For the purpose of this section business communication shall mean any transmission or communication the purpose of which is to facilitate the regular business or commercial affairs of any party.

[37 FR 21998, Oct. 18, 1972]

**§ 97.115 Music prohibited.**

The transmission of music by an amateur station is forbidden.

**§ 97.116 Amateur radiocommunication for unlawful purposes prohibited.**

The transmission of radiocommunication or messages by an amateur radio station for any purpose, or in connection with any activity, which is contrary to Federal, State, or local law is prohibited.

[37 FR 21999, Oct. 18, 1972]

**§ 97.117 Codes and ciphers prohibited**

The transmission by radio of messages in codes or ciphers in domestic and international communications to or between amateur stations is prohibited. All communications regardless of type of emission employed shall be in plain language except that generally recognized abbreviations established by regulation or custom and usage are permissible as are any other abbreviations or signals where the intent is not to obscure the meaning but only to facilitate communications.

**§ 97.119 Obscenity, indecency, profanity.**

No licensed radio operator or other person shall transmit communications containing obscene, indecent, or profane words, language, or meaning.

**§ 97.121 False signals.**

No licensed radio operator shall transmit false or deceptive signals or communications by radio, or any call letter or signal which has not been assigned by proper authority to the radio station he is operating.

**§ 97.123 Unidentified communications.**

No licensed radio operator shall transmit unidentified radio communications or signals.

**§ 97.125 Interference.**

No licensed radio operator shall willfully or maliciously interfere with or cause interference to any radio communication or signal.

**§ 97.127 Damage to apparatus.**

No licensed radio operator shall willfully damage, or cause or permit to be damaged, any radio apparatus or installation in any licensed radio station.

**§ 97.129 Fraudulent licenses.**

No licensed radio operator or other person shall obtain or attempt to obtain, or assist another to obtain or attempt to obtain, an operator license by fraudulent means.

**ADMINISTRATIVE SANCTIONS****§ 97.131 Restricted operation.**

(a) If the operation of an amateur station causes general interference to the



reception of transmissions from stations operating in the domestic broadcast service when receivers of good engineering design including adequate selectivity characteristics are used to receive such transmissions and this fact is made known to the amateur station licensee, the amateur station shall not be operated during the hours from 8 p. m. to 10:30 p. m., local time, and on Sunday for the additional period from 10:30 a. m. until 1 p. m., local time, upon the frequency or frequencies used when the interference is created.

(b) In general, such steps as may be necessary to minimize interference to stations operating in other services may be required after investigation by the Commission.

#### § 97.133 Second notice of same violation.

In every case where an amateur station licensee is cited within a period of 12 consecutive months for the second violation of the provisions of §§ 97.61, 97.63, 97.65, 97.71, or 97.73, the station licensee, if directed to do so by the Commission, shall not operate the station and shall not permit it to be operated from 6 p. m. to 10:30 p. m., local time, until written notice has been received authorizing the resumption of full-time operation. This notice will not be issued until the licensee has reported on the results of tests which he has conducted with at least two other amateur stations at hours other than 6 p. m. to 10:30 p. m., local time. Such tests are to be made for the specific purposes of aiding the licensee in determining whether the emissions of the station are in accordance with the Commission's rules. The licensee shall report to the Commission the observations made by the cooperating amateur licensees in relation to the reported violations. This report shall include a statement as to the corrective measures taken to insure compliance with the rules.

#### § 97.135 Third notice of same violation.

In every case where an amateur station licensee is cited within a period of 12 consecutive months for the third violation of §§ 97.61, 97.63, 97.65, 97.71,

or 97.73, the station licensee if directed by the Commission, shall not operate the station and shall not permit it to be operated from 8 a. m. to 12 midnight, local time, except for the purposes of transmitting a prearranged test to be observed by a monitoring station of the Commission to be designated in each particular case. The station shall not be permitted to resume operation during these hours until the licensee is authorized by the Commission, following the test, to resume full-time operation. The results of the test and the licensee's record shall be considered in determining the advisability of suspending the operator license or revoking the station license, or both.

#### § 97.137 Answers to notices of violations.

Any licensee receiving official notice of a violation of the terms of the Communications Act of 1934, as amended, any legislative act, Executive order, treaty to which the United States is a party, or the rules and regulations of the Federal Communications Commission, shall, within 10 days from such receipt, send a written answer direct to the office of the Commission originating the official notice: *Provided, however,* That if an answer cannot be sent or an acknowledgment made within such 10-day period by reason of illness or other unavoidable circumstances, acknowledgment and answer shall be made at the earliest practicable date with a satisfactory explanation of the delay. The answer to each notice shall be complete in itself and shall not be abbreviated by reference to other communications or answers to other notices. If the notice relates to some violation that may be due to the physical or electrical characteristics of transmitting apparatus, the answer shall state fully what steps, if any, are taken to prevent future violations, and if any new apparatus is to be installed, the date such apparatus was ordered, the name of the manufacturer, and promised date of delivery. If the notice of violation relates to some lack of attention or improper operation of the transmitter, the name of the operator in charge shall be given.

### Subpart F—Radio Amateur Civil Emergency Service (RACES)

SOURCE: The provisions of this Subpart F appear at 28 F.R. 14193, Dec. 21, 1963, unless otherwise noted.

#### GENERAL

#### § 97.161 Nature of this service.

(a) The Radio Amateur Civil Emergency Service provides for amateur radio operation for civil defense communications purposes only, during periods of local, regional or national civil emergencies, including any emergency which may necessitate invoking of the President's War Emergency Powers under the provisions of Section 606 of the Communications Act of 1934, as amended.

(b) Pursuant to the provisions of section 4 (j) of the Communications Act of 1934, as amended, records relating to the Radio Amateur Civil Emergency Service shall not be open to general public inspection.

[28 F.R. 14193, Dec. 21, 1963, as amended at 31 F.R. 9807, July 20, 1966]

#### § 97.163 Definitions.

For the purposes of this subpart, the following definitions are applicable:

(a) *Radio Amateur Civil Emergency Service.* A radiocommunication service carried on by licensed amateur radio stations while operating on specifically designated segments of the regularly allocated amateur frequency bands under the direction of authorized local, regional or federal civil defense officials pursuant to an approved civil defense communications plan.

(b) *Radio Amateur Civil Emergency Station.* An amateur radio station which is authorized to operate in the Radio Amateur Civil Emergency Service for the purpose of transmitting and receiving civil defense communications.

(c) *Civil defense communications.* Communications or signals essential to the conduct of civil defense activities of duly authorized civil defense organizations, including communications directly concerning safety of life, preservation of property, maintenance of law and order, alleviation of human suffering and need and dissemination of warnings of enemy attack to the civilian population in case of actual or impending armed attack or in any disaster or other incident endangering the public welfare. Such com-

munications may also include transmissions necessary to establishment and maintenance of the radio system and communications essential to the training of civil defense personnel.

(d) *Civil defense authority.* The legally appointed Director of Civil Defense, or his authorized alternate or representative, for the particular geographical area (city, county, etc.) which a proposed radio station is intended to serve, and who is responsible to local governmental authority for protection and aid to the civilian population in the event of armed attack or of any disaster or other incident endangering public safety.

(e) *Civil Defense Communications Officer.* The official of any duly constituted civil defense organization having direct responsibility under the Director of that organization for the provision, organization, maintenance, readiness, and utilization of all means of communication to be used by such civil defense organization in the performance of its lawful functions.

(f) *Civil Defense Radio Officer.* The duly designated official of a legally constituted civil defense organization who is directly responsible either to the Communications Officer or to the Director of such civil defense organization for the provision, organization, maintenance, readiness, and utilization of radio communications facilities for civil defense use.

(g) *Radio Amateur Civil Emergency Network.* All radio amateur civil emergency stations intended to be included in the civil defense communications plan of the area concerned and which operate, or are to operate, in conjunction with a single control station. Such network may be made up of several separately authorized radio amateur civil emergency stations or units of such stations, or may be made up of several units of the same station operated at different locations. In addition, the same radio amateur civil emergency station or any unit of such station may be a part of more than one network; e. g., the control station of one network may also be the control station or a member station of another network operated in conjunction therewith.

(h) *Net control station.* Any authorized Radio Amateur Civil Emergency Station unit designated by the civil de-



fense radio officer, with the approval of the Director of Civil Defense or the Civil Defense Communications Officer, to direct the use and operation of other station units of the same Radio Amateur Civil Emergency Network.

(1) *Civil defense communications plan.* The plan under which communications facilities are provided to all branches and phases of the civil defense organization in the area concerned and for all of its activities. Such plan may be drawn up in accordance with the needs of the particular area affected and the facilities, including licensed radio operators and stations, available in that particular area. Plans need not be uniform, but to be acceptable to the Commission they must comply with the following:

(1) The plan must be clearly described in writing, and it may include diagrams and sketches. It must include a general description of the facilities and personnel available to provide communications for civil defense purposes and the expected usage to be made thereof.

(2) The plan must have been approved by the state and federal civil defense authorities having jurisdiction of the area affected.

(3) The plan must include the name, address, official title, and a statement of the qualifications of the Civil Defense Radio Officer (and of any and all alternate Radio Officers) responsible for the organization, training, and utilization of the radio amateur civil emergency station networks under that plan, and the name, address, and official title of the civil defense official responsible for the coordination of all civil defense activities of the area concerned.

(4) The plan must include a general description of each radio amateur civil emergency station network under the jurisdiction of each respective Civil Defense Radio Officer, showing location of fixed installations, purpose, area of activity to be served, an estimate of the number of radio amateur stations and independent operating units of such stations intended to be used in the network, and a description, including the location and call sign, of its control station and any alternate control station or stations.

(5) The plan must include a general statement as to the frequency bands to

be used by the radio amateur civil emergency station networks and the approximate number of stations, or units of such stations, to be operated in each such band, together with a description of the method which has been adopted for liaison and coordination of frequency usage with other similar networks in the same and adjacent areas.

(6) The plan must include a statement setting forth the facilities available to the area and the procedures to be followed in determining the loyalty and general reliability of all civil defense Radio Officers, amateur radio station licensees and radio operators intended to be utilized in the implementation of that plan. (See §§ 97.173(b), 97.175(c), and 97.203(a).)

[28 F.R. 14193, Dec. 21, 1963, as amended at 31 F.R. 9807, July 20, 1966]

#### § 97.165 Applicability of rules governing amateur radio stations and operators.

In all cases not specifically covered by the regulations contained in this subpart, licensed amateur stations authorized to be operated in the Radio Amateur Civil Emergency Service shall be governed by the provisions of the rules governing amateur radio stations and operators (Subparts A through E of this part) which are not in conflict herewith. In any case of conflict, the rules governing the Radio Amateur Civil Emergency Service shall govern in respect to any station operated in that service.

#### ORGANIZATION

#### § 97.167 Organization of networks.

To supplement or extend other means of communication available to the civil defense organization or to provide necessary communications for which no other means exist, local radio amateur civil emergency station networks shall be organized by the civil defense authority of the area concerned and under the immediate direction of the Civil Defense Radio Officer. Such networks shall include all licensed amateur radio stations which are intended to be included in the civil defense communications plan of the area concerned. In any particular area there may be several such networks and each network may be independent of the others. Whenever there is more than one network in the same area, all such

networks must share, under a single civil defense communications plan, the available frequencies in an efficient and orderly manner. The various networks in adjacent areas shall establish proper liaison and a description of the arrangements made shall become a part of their respective civil defense communications plans. Such arrangements shall provide for the efficient sharing of frequencies, plans for operating procedure designed to avoid mutual interference, and the exchange of communications facilities upon an inter-area basis where need for such exchange may arise.

**§ 97.169 Approval of civil defense communications plans.**

(a) All civil defense communications plans which provide for the utilization of radio amateur civil emergency stations for civil defense purposes must be submitted to and approved by the responsible state (or territorial) and federal civil defense authorities before the licensed amateur stations intended to be used will be authorized to operate in the radio amateur civil emergency service.

(b) Material changes or modifications in such civil defense communications plans which alter the basic information required shall be submitted for approval in the same manner as the original plans.

(c) Written certification of approval by the competent state and federal civil defense authorities of each civil defense communications plan, or of any changes or modifications thereof, shall accompany the copies of such plans, changes, or modifications which are submitted to the Commission in accordance with the provisions of this part.

**§ 97.171 Certification of Civil Defense Radio Officer.**

(a) Certification of the Civil Defense Radio Officer shall be made on FCC Form 482. Such form shall be executed by the civil defense authority responsible for the coordination of all civil defense activities of the area concerned and show:

(1) The name, address, and area of responsibility of such civil defense radio officer,

(2) Statement by him that he has accepted such appointment and agrees to perform faithfully the duties of that office, including those prescribed by this subpart,

(3) A certification by the responsible civil defense authority that he has satis-

fied himself that the named civil defense radio officer is fully qualified in accordance with the provisions of § 97.173, and

(4) The effective date of the appointment of the civil defense radio officer and the name of any previous civil defense radio officer whose appointment is terminated.

(b) FCC Form 482, when completed in accordance with this section, shall be forwarded to the Commission via the responsible state and federal civil defense officials whose approval (or disapproval) shall be clearly indicated on the form.

**§ 97.173 Qualifications of Civil Defense Radio Officer.**

No person shall be considered qualified as a Civil Defense Radio Officer until he shall have been found to satisfy the following minimum requirements:

(a) He shall hold either (1) a valid commercial radio operator's license of either first or second class (radiotelegraph or radiotelephone) issued by the Commission, or (2) a valid amateur operator license issued by the Commission, other than the Technician or Novice Class.

(b) A determination shall have been made as to his loyalty to the United States and his general reliability, in accordance with the procedures provided in the approved civil defense communications plan of the area concerned.

(c) It shall have been determined that his technical and administrative qualifications are adequate for the proper performance of his duties.

**§ 97.175 Duties of Civil Defense Radio Officer.**

The duties of the Civil Defense Radio Officer shall include among such other duties as may be assigned or as may be required in accordance with the provisions of this subpart:

(a) The direction and supervision of all radio stations forming the radio amateur civil emergency networks in accordance with the approved civil defense communications plan for the area involved.

(b) Provision for adequate monitoring of all transmissions of the stations under his supervision to assure compliance with the rules and regulations of the Commission, and to guard against improper use of the radio stations and intentional or inadvertent transmissions



which might jeopardize the defense or security of the United States.

(c) The recommendation to the Commission for the granting of authorizations to individual amateurs for operation in this service, and certification to the Commission as to the loyalty to the United States and reliability of such individuals and the certification required in accordance with § 97.181.

(d) The recommendation to the Commission for cancellation of any authorization previously recommended or certified whenever subsequent investigation or circumstances indicate that the original recommendation or certification should not have been made.

#### STATION AUTHORIZATIONS

##### § 97.177 Station authorization required.

No radio station may be operated in the Radio Amateur Civil Emergency Service except pursuant to an authorization for such operation issued by the Federal Communications Commission.

##### § 97.179 Eligibility for station authorization.

An authorization to operate a station in the Radio Amateur Civil Emergency Service will be issued only to a person who holds an amateur radio operator license, other than Technician or Novice Class, and an appropriate amateur radio station license.

##### § 97.181 Filing of application.

Each application for a station authorization or for renewal thereof shall be submitted on FCC Form 481-1, signed by the applicant and countersigned by the appropriate Civil Defense Radio Officer, who shall certify to the following:

(a) That the applicant has satisfied all requirements (both local and federal) for participation in the civil defense organization and is actually enrolled as a member of the local organization which serves the area where the station will operate.

(b) That the amateur station licensed in the name of the applicant has been approved for and, when authorized by the Commission, will actually constitute a unit of a civil defense communications network in accordance with an approved civil defense communications plan or amendment thereof.

##### § 97.183 Additional data required.

Each application for a station authorization in the Radio Amateur Civil

Emergency Service shall be accompanied by the following data unless such material has already been submitted to the Commission, in which case the application shall clearly identify the material previously submitted:

(a) A copy of the approved communications plan (as defined in this part) for the civil defense communications network in which the station will operate, together with a copy of each approved amendment, change or modification of that plan.

(b) The official certification of the Civil Defense Radio Officer as provided in this subpart.

##### § 97.185 Single application for all equipment under one amateur station license.

Only one application need be filed for any one amateur station, including all transmitting equipment under the control of the licensee of that station, even though individual units of such station are capable of being operated and are intended to be operated independently at different locations, or as portable or mobile stations with no fixed locations. No distinction need be made between those units which are personally owned by the amateur station licensee and those units which are otherwise under his technical control for operation in this service.

##### § 97.187 Issuance of station authorization.

An authorization to operate in this service will be issued in the discretion of the Commission upon satisfactory completion of all requirements of this subpart and proper certification that the requirements of the civil defense organization for which the station will be used have been or are being complied with. The station authorization (Form 481-3) will be forwarded to the Civil Defense Radio Officer for delivery to the applicant. Such authorization will be accompanied by a stub (Form 481-2) which may be retained by the civil defense radio officer for his records.

##### § 97.189 Term of station authorization.

(a) Authorization to operate an amateur station in the Radio Amateur Civil Emergency Service will be issued for a term running concurrently with the term of the amateur radio station license. Application for renewal of such authorization shall be filed concurrently

with application for renewal of the basic amateur radio station license.

(b) Whenever, under rules contained in Subparts A through E of this part, modification of the basic amateur station license becomes necessary, if such modification affects the information submitted with the original application for authorization in the Radio Amateur Civil Emergency Service, application for modification of the Radio Amateur Civil Emergency Service station authorization shall be submitted concurrently therewith.

(c) Nothing in this section shall be construed to alter the Commission's authority to cancel or amend a station authorization in the Radio Amateur Civil Emergency Service in accordance with the applicant's agreement as indicated on the initial application for station authorization.

[28 F.R. 14193, Dec. 21, 1963, as amended at 31 F.R. 9807, July 20, 1966]

#### § 97.191 Cancellation of station authorization.

(a) Each authorization for operation in the Radio Amateur Civil Emergency Service shall be issued with the express provision that such authorization is subject to revocation or cancellation without hearing whenever, in the opinion of the Commission, the security of the United States or the proper functioning of the Radio Amateur Civil Emergency Service would be served thereby.

(b) The station authorization shall be submitted to the Commission (via the Civil Defense Radio Officer) for cancellation under the following circumstances:

(1) The station for which the authorization was issued becomes inactive for a period of three months or it is not planned to use the station in the radio amateur civil emergency network for a period of at least three months.

(2) The basic amateur radio station license of the station has expired and has not been renewed.

(3) In cases where the amateur radio station license and the radio amateur civil emergency station authorization have both been modified, the original authorization of the latter shall be submitted to the Commission immediately upon receipt by the licensee of a new or modified authorization.

[28 F.R. 14193, Dec. 21, 1963, as amended at 31 F.R. 9807, July 20, 1966]

#### TECHNICAL REQUIREMENTS

##### § 97.193 Frequencies available.

(a) Except as provided in paragraph (e) of this section, the following frequency and frequency bands and associated emissions are available on a nonexclusive basis to the individual class of stations or units of such stations in the Radio Amateur Civil Emergency Service.

(1) For use only by authorized stations or units of such stations which are operated under the direct supervision of duly designated and responsible officials of the civil defense organization:

Frequency band:	Authorized emission
1800-1825 kHz <sup>1</sup> ---	0.1A1, 1.1F1, 6A3
1975-2000 kHz <sup>1</sup> ---	0.1A1, 1.1F1, 6A3
3500-3510 kHz----	0.1A1, 1.1F1
3990-4000 kHz----	0.1A1, 1.1F1, 6A3, 6F3

<sup>1</sup>Use of frequencies in the band 1800-2000 kHz is subject to the priority of the Loran system of radionavigation in this band and to the geographical, frequency, emission, and power limitations contained in § 97.61 of the rules governing amateur radio stations and operators (Subparts A through E of this part). The use of these frequencies by stations authorized to be operated in the Radio Amateur Civil Emergency Service shall not be a bar to expansion of the radionavigation (Loran) service, and such use shall be considered temporary in the sense that it shall remain subject to cancellation or to revision, in whole or in part, without hearing, whenever the Commission shall deem such cancellation or revision to be necessary or desirable in the light of the priority within this band of the Loran system of radionavigation.

(2) For use by all authorized stations only in the continental United States, except that, the bands 7245-7255 and 14,220-14,230 kHz are also available in Alaska, Hawaii, Puerto Rico, and the Virgin Islands:

Frequency band:	Authorized emission
3510-3516 kHz----	0.1A1, 1.1F1.
3516-3550 kHz <sup>1</sup> ---	0.1A1, 1.1F1.
3984-3990 kHz----	0.1A1, 1.1F1, 6A3, 6F3.
7097-7103 kHz----	0.1A1, 1.1F1.
7103-7125 kHz <sup>1</sup> ---	0.1A1, 1.1F1.
7245-7255 kHz <sup>1</sup> ---	0.1A1, 1.1F1, 6A3, 6F3.
14047-14053 kHz--	0.1A1, 1.1F1.
14220-14230 kHz <sup>1</sup> ---	0.1A1, 1.1F1, 6A3, 6F3.
21047-21053 kHz--	0.1A1, 1.1F1.

<sup>1</sup>The availability of the frequency bands 3516-3550 kHz, 7103-7125 kHz, 7245-7247 kHz, 7253-7255 kHz, 14220-14222 kHz and 14228-14230 kHz for use during periods of actual civil defense emergency is limited to the initial 30 days of such emergency, unless otherwise ordered by the Commission.



## (3) For use by all authorized stations:

Frequency or frequency bands:	Authorized emission
3997 kHz <sup>1</sup> -----	0.1A1, 6A3.
28.55-28.75 MHz---	0.1A1, 6A3, 6F3, 6A4.
29.45-29.65 MHz---	0.1A1, 1.1F1, 6A3, 6A4, 40F3.
50.35-50.75 MHz---	0.1A1, 6A2, 6F2, 6A3, 6F3, 6A4.
53.30 MHz <sup>1</sup> -----	40F3.
53.35-53.75 MHz---	0.1A1, 1.1F1, 6A2, 6F2, 6A3, 6A4, 40F3.
145.17-145.71 MHz---	0.1A1, 1.1F1, 6A2, 6F2, 6A3, 6A4, 40F3.
146.79-147.33 MHz---	0.1A1, 1.1F1, 6A2, 6F2, 6A3, 6A4, 40F3.
220-225 MHz-----	0.1A1, 1.1F1, 6A2, 6F2, 6A3, 6A4, 40F3.

<sup>1</sup> For use in emergency areas when required to make initial contact with military units; also, for communication with military stations on matters requiring coordination.

(b) The selection and use of specific frequencies within the authorized frequency bands by stations in the Radio Amateur Civil Emergency Service shall be in accordance with a coordinated local area and adjacent area civil defense communications plan and applicable rules of this part.

(c) Except as provided in paragraph (d) of this section, at such time as any or all of these frequency bands are withdrawn from availability to stations operating in the Amateur Radio Service, such bands shall be jointly available to stations in the Radio Amateur Civil Emergency Service and to stations in the military services for training and tactical operations. At that time, in areas where interference might occur, local mutual arrangements shall be made regarding times of operation such as to preclude or satisfactorily alleviate interference. In time of actual civil defense emergency, stations in the Radio Amateur Civil Emergency Service shall have absolute priority.

(d) In the band 220 to 225 MHz stations operating in the Radio Amateur Civil Emergency Service shall not at any time cause harmful interference to the government radiolocation service.

(e) A repeater station in the Radio Amateur Civil Emergency Service may operate on any frequency, and with any associated emission, above 50 MHz listed in paragraph (a) of this section, except for 220 MHz to 222 MHz.

[28 F.R. 14193, Dec. 21, 1963, as amended at 37 F.R. 6593, Mar. 31, 1972; 37 F.R. 18547, Sept. 13, 1972]

## § 97.195 Classification of emissions.

(a) For the purposes of this subpart, the authorized emissions, as contained in the table of § 97.193, are defined as follows:

- 0.1A1—Continuous wave telegraphy.
- 1.1F1—Frequency shift telegraphy.
- 6A2—Telegraphy amplitude modulated at audio frequency.
- 6F2—Telegraphy frequency modulated at audio frequency.
- 6A3—Commercial quality amplitude modulated telephony.
- 6F3—Narrow band frequency or phase modulated telephony.
- 40F3—Wide band frequency or phase modulated telephony.
- 6A4—Amplitude modulated facsimile.

(b) On frequencies where wide band frequency or phase modulated telephony (40F3) is authorized, narrow band frequency or phase modulated telephony (6F3) may also be employed; similarly, where commercial quality amplitude modulated telephony (6A3) is authorized, single or double sideband amplitude modulated telephony, with or without carrier or with reduced carrier, may also be employed.

## § 97.197 Transmitter power.

The transmitting equipment of a radio station in this service shall be adjusted in such manner as to produce the minimum radiation necessary to carry out the communications desired. No station operating in this service shall use a direct current plate power input to the vacuum tube or tubes supplying energy to the antenna in excess of that permitted to be used by a licensed amateur radio station when operated on the same frequencies or in the same frequency bands in accordance with the provisions of the rules governing amateur radio stations and operators (Subparts A through E of this part).

## § 97.199 Equipment requirements.

(a) Except under the conditions specified in paragraph (b) of this section, all stations authorized to be operated in the Radio Amateur Civil Emergency Service shall be capable of receiving on the same frequencies or frequency bands utilized for transmission.

(b) When a station in this service is operated only on a single frequency or frequency band for cross-band operation in communication with a station or stations operating on another frequency or in another frequency band, or in other

services, such station shall be capable of receiving the station with which it is communicating.

(c) The direct modulation of an oscillator with a frequency stability less than that obtainable with crystal control, or the radiation of a signal having simultaneous amplitude and frequency or phase modulation, is prohibited on frequencies below 220 MHz.

[28 F.R. 14193, Dec. 21, 1963, as amended at 37 F.R. 6593, Mar. 31, 1972]

#### § 97.201 Alleviation of harmful interference.

(a) When emissions of stations in the Radio Amateur Civil Emergency Service, other than those necessary to carry on the desired communications, cause harmful interference to stations in this or any other service, the Commission may, in its discretion, require appropriate technical changes in the equipment to alleviate the interference.

(b) When the emissions of stations in the Radio Amateur Civil Emergency Service that are necessary to carry on the desired communications cause harmful interference to stations in other radio services, appropriate action shall be taken to alleviate such interference including, if necessary, the suspension (except during times of an actual state of civil emergency) of such emissions as cause the interference.

#### OPERATING REQUIREMENTS

#### § 97.203 Operator requirements.

(a) No person shall operate a station in the Radio Amateur Civil Emergency Service unless (1) that person holds a valid radio operator license of the proper grade, as described in this section, and (2) that person holds a valid written certification by the chief of the local, regional, or state Civil Defense organization of the area in which he serves that he has satisfied all federal, state, and local requirements for enrollment in the Civil Defense organization as a radio operator and is actually enrolled therein. Such certification shall clearly indicate that a determination has been made as to his loyalty to the United States and general reliability in accordance with the procedures described in the approved civil defense communications plan for the area concerned. (See §§ 97.163(i) and 97.169.)

(b) The person manipulating the key of a manually operated radio-telegraph

transmitter of a station authorized to operate in this service shall hold either (1) any class of amateur operator license issued by the Commission, other than the Technician or Novice Class, or (2) any class of commercial radiotelegraph operator license issued by the Commission other than the Temporary Limited Radiotelegraph Second Class Operator License, together with the certification required in accordance with the provisions of paragraph (a) of this section.

(c) Except as specifically provided in paragraphs (a) and (b) of this section, any station in the Radio Amateur Civil Emergency Service may be operated by the holder of any class of amateur or commercial radio operator license issued by the Commission other than a Temporary Limited Radiotelegraph Second Class Operator License or an Aircraft Radiotelephone Operator Authorization: *Provided*, That, when such operation is performed by the holder of a Novice Class amateur operator license or by the holder of a commercial radiotelephone or radiotelegraph third class operator license or restricted operator permit; (1) such operator shall be prohibited from making any adjustments that may result in improper transmitter operation, (2) the equipment shall be so designed and installed that none of the operations necessary to be performed during the course of the normal rendition of the service of the station may cause off-frequency operation or result in any unauthorized radiation, and (3) any needed adjustments of the transmitter that may affect the proper operation of the station shall be regularly made by or under the immediate supervision and responsibility of the holder of either an amateur operator license other than the Novice Class or a commercial radiotelephone or radiotelegraph first or second class operator license.

(d) All adjustments or tests during or coincident with the installation, servicing or maintenance of the transmitting equipment of a station in this service shall be made only by or under the immediate supervision and responsibility of the holder of either (1) an amateur operator license other than the Novice Class or (2) a commercial radiotelephone or radiotelegraph first or second class operator license issued by the Commission, who in addition holds the certification required in accordance with the provisions of paragraph (a) of this section.



**§ 97.205 Operation at other than licensed location.**

A station in this service, or any unit thereof, may be operated at any location in accordance with the approved civil defense communications plan for the area concerned, in the discretion of and as directed by the Civil Defense Radio Officer, without notice to the Commission and without limitation as to the length of time within which such operation takes place: *Provided*, That nothing in this section shall be construed to waive the necessity for modification of the authorization of a station in this service when the address of the licensee or the basic location of the station is changed, or for any other reason where, because of a change of the communications plan or other reason, the information heretofore furnished the Commission with the original application may be materially altered or changed.

**§ 97.207 Availability of station authorizations and operator licenses.**

(a) The original station authorization permitting operation of the licensed amateur station in the Radio Amateur Civil Emergency Service, or a photocopy thereof, shall be permanently attached to each transmitter of such station, including each transmitter which is capable of being operated and intended to be operated independently at different locations, if the transmitter is readily accessible, or, if the control position is located at a place other than the transmitter location, it may be posted at the control position: *Provided*, That, whenever a photocopy of the station authorization is utilized in compliance with the requirement of this paragraph, the original station authorization shall be made available for inspection upon reasonable request from any authorized representative of the Federal Government.

(b) The original radio operator license, or a verification card (FCC Form 758-F) in the case of the holder of a commercial radio operator license of the diploma type, of the operator controlling the emissions of a station authorized to be operated in this service together with the certification required by § 97.203(a), shall be carried on his person or kept immediately available at the place where he is operating the station or any independent unit of a station: *Provided*, That, whenever a verification card (FCC Form 758-F) is utilized in compliance with the requirement of this paragraph,

the original operator license shall be made available for inspection upon reasonable request from an authorized representative of the Federal Government.

(c) When a licensed amateur station, or an independent unit of such station, is operated at a location other than that shown in its license in compliance with the provisions of this subpart, the basic amateur station license required by Subparts A through E of this part need not be readily available at the station or unit location, but shall be made available for inspection upon reasonable request from any authorized representative of the Federal Government.

**§ 97.209 Radio station log.**

(a) Except as otherwise expressly provided in this subpart, there shall be maintained at each radio amateur civil emergency station, or unit of such station, an accurate log of all operations. The following information shall be recorded in such station log:

(1) The name and address of the station licensee, the regularly assigned call sign of the station and unit number if any, the name of the radio amateur civil emergency network or networks in which the station is normally operated, and the d.c. plate power input to the vacuum tube or tubes supplying energy to the transmitting antenna system. This information need be entered only once in the log unless there is a change in any of the items specified in this subparagraph, but the original entry and each change shall show the date on which the entry was made.

(2) The date and time of beginning and end of each period during which the station was operated, the purpose of such operation, and the frequencies or bands of frequencies on which the operation took place.

(3) The call signs or other identification of all stations or units of such stations with which communications are established or attempted during such period of operation.

(4) The signature of the licensed operator on duty and in charge of the operation of the station or unit of such station during each period of operation, and the signature of each licensed operator who manipulated the key of any manually operated radiotelegraph transmitter of such station or unit. The signature of the operator shall be entered with the date and time at the beginning and end of each period during which he

performed the foregoing duties, and at least once on each page additional to the first page, covering the period for which he was the responsible operator. The signatures of any additional operators who operate the transmitter(s) during the regular watch of another operator and details to indicate the periods during which they operated the transmitter(s) shall be entered in the proper form.

(5) Upon completion of each period of operation for any purpose, there shall be entered in the log a summary of such operation describing the nature thereof and, if message traffic or other record communications were exchanged with other stations, an estimate of the amount of such traffic handled together with a report on any unusual delays which were experienced in the delivery of such messages.

(6) There shall be no erasure, obliteration, or destruction of any part of the log of any station or station unit. Corrections shall be made by striking out the erroneous portion and initialing and dating the corrections.

(b) Mobile radio amateur civil emergency stations or station units, and portable radio amateur civil emergency stations or station units, where not being operated at pre-determined fixed locations, shall be exempt from the requirements of maintaining a log to the extent that the entries required under the preceding paragraph of this section are substantially contained in the log of another station or stations operating in the same radio amateur civil emergency networks. All stations or station units operating in accordance with the provisions of this subpart shall be exempt from the requirements concerning station logs contained in Subpart D of this part whenever it is shown that compliance with these requirements would interfere with the expeditious handling of civil defense communications or communication drills.

(c) The current portion of the log shall be kept at the location of the operating or control position of the station or unit. Other portions of the log shall be retained by the licensee for a period of one year, at a place determined by the civil defense Radio Officer to be appropriate and advisable: *Provided*, That the logs of a station in this service shall be made available for inspection upon reasonable request by any authorized representative of the Federal Government:

*And provided further*, That those portions of any log covering operation of a station in this service in connection with any actual condition jeopardizing the public safety or affecting the national defense or security shall not be destroyed unless prior approval for such destruction shall have been received from the Commission.

#### § 97.211 Station identification.

(a) Stations operating in the Radio Amateur Civil Emergency Service shall identify themselves in the same manner and under the same conditions as prescribed in Subpart D of this part, except that:

(1) Additional designators to indicate portable or mobile operation, or to indicate operation at a location other than that specified in the station license, shall not be used.

(2) When engaged in network operation, after a station or unit has been fully identified at least once, further identification by that station or unit may be accomplished by the use of abbreviated call signs or other distinctive signals prescribed by the civil defense Radio Officer in lieu of the call signs otherwise required to be transmitted by that station or unit. A record of such abbreviated call signs or other distinctive signals shall be maintained by the Radio Officer and shall be made available for inspection upon reasonable request by any authorized representative of the Federal Government.

(b) When two or more separate units of a station, which is authorized to be operated in the Radio Amateur Civil Emergency Service, are operated independently at different locations, each unit shall separately identify itself by the addition of a unit number at the end of its call sign. When transmitting by telegraphy such additional identification shall immediately follow the basic call sign and to avoid confusion with portable or mobile indicators, shall not be separated therefrom by the use of the "slant" or fraction bar, or other punctuation mark or symbol.

#### § 97.213 Tactical call signs.

Stations operating in this service, and independent units of such stations, may be assigned tactical or secret call signs by the Commission or by competent civil defense authority, and may utilize such tactical call signs in lieu of the call signs appearing on the station licenses when



such use is directed by competent civil defense authority: *Provided*, That a list of all such tactical call signs assigned stations under his direction shall be maintained by the civil defense Radio Officer and shall be made available for inspection upon reasonable request by any authorized representative of the Federal Government: *And provided further*, That when such tactical call signs are intended to be used at times other than during communications in connection with actual or impending conditions which appear to jeopardize the defense or security of the United States, a list of such tactical call signs and the stations or units to which assigned shall be furnished the Commission prior to such use.

#### USE OF STATIONS

##### § 97.215 Limitations on use of stations.

(a) No station authorized to be operated in this service other than a control station as defined in this subpart, shall be operated for the purpose of transmitting any signal, message, or other communications except with the permission and under the operational control of the control station of the network in which it is operating: *Provided*, That nothing in the foregoing shall be construed to prohibit the transmission by any station or unit of a station of such signals as may be necessary for the purpose of alerting or making contact with the control station of the network, or for the purpose of transmitting actual emergency civil defense communications if the control station is disabled or is otherwise inoperative.

(b) Nothing in this section shall be construed to prevent the operation of a station which is authorized to be operated in this service for the purpose of brief tests or adjustments during or coincident with the installation, servicing or maintenance of such station: *Provided*, That the transmissions of that station during such tests or adjustments shall not cause harmful interference to the conduct of communications by any other station.

(c) No station in this service shall be used to transmit or to receive messages for hire, nor to transmit communications for material compensation, direct or indirect, paid or promised.

##### § 97.217 Hours of operation.

Stations in this service may be operated at such times and under such con-

ditions as may be prescribed by the Communications Officer or other responsible official of the civil defense organization having jurisdiction over the area which the station will serve: *Provided*, That the communications of such stations shall at all times be in accordance with the permissible communications authorized in this subpart.

##### § 97.219 Points of communication.

Stations in this service may communicate with each other, with stations in the Disaster Communications Service, and with stations of the United States Government which are authorized to exchange communications with stations in this service by the particular agency having control. In addition, stations in this service may communicate, for the purpose of exchanging civil defense communications, with any other station in any service provided by the Commission's rules, whenever such station is authorized to communicate with stations in the Radio Amateur Civil Emergency Service by the provisions of the Commission's rules governing the class of station concerned or in accordance with the provisions of § 2.405 of this chapter.

##### § 97.221 Permissible communications.

Stations in this service are authorized to transmit only the following types of civil defense communications:

(a) Communications for training purposes consisting of necessary drills and tests to insure establishment and maintenance of orderly and efficient operation of the radio amateur civil emergency networks and such other radio stations and networks as may be associated therewith for the conduct of civil defense communications, including communications directly concerned with the conducts of practice alerts, practice blackouts, practice mobilization, and other comparable situations as may be ordered or initiated by competent civil defense authority or by the United States governmental or military authority charged with the defense of the area concerned. All messages which are transmitted in connection with such drills, exercises and tests shall be clearly identified as such by use of any one of the words "Drill" or "Exercise" or "Test" in the body of such messages.

(b) Communications when there is an impending or actual condition jeopardiz-

ing the public safety or affecting the national defense or security:

(1) Communications directly concerning the activation of the radio amateur civil emergency station networks or such other radio stations and networks as may be associated with the networks for the conduct of civil defense communications.

(2) Communications directly concerning the conduct of service by the radio amateur civil emergency networks and such other radio stations and networks as may be associated therewith.

(3) Communications directly concerning safety of life, preservation of property, maintenance of law and order, alleviation of human suffering and need, and combating of armed attack or sabotage.

(4) Communications directly concerning the accumulation and dissemination of public information or instructions to the civilian population essential to the activities of the civil defense organization or that of other authorized governmental or relief agencies.

(5) Communications directly concerning the transaction of business essential to public welfare.

#### § 97.223 Use of codes and ciphers.

Any station in this service is authorized to transmit messages in codes and ciphers and to utilize any method of secret or coded authentication of its transmissions when such method of concealing the contents of messages or such authentication procedure is prescribed by the competent civil defense authority of the area served by the station and is approved by the cognizant federal civil defense authorities.

#### § 97.225 Priority of communications.

The order of priority of communications by stations in this service, when there is an impending or actual condition jeopardizing the public safety or affecting the defense or security of an area, shall be determined by the cognizant civil defense authority of the area concerned or his authorized representative.

#### § 97.227 Operating procedure.

The operating procedure, and the method of circuit control by the control station of each network, shall be determined by the responsible civil defense authority of the area concerned and shall, in general, conform as nearly

as possible to the operating procedure normally followed in other services in the expeditious handling of message traffic by the method of transmission in use.

#### Subpart G—Operation of Amateur Radio Stations in the United States by Aliens Pursuant to Reciprocal Agreements

SOURCE: The provisions of this Subpart G appear at 30 F.R. 2706, Mar. 3, 1965, unless otherwise noted.

#### § 97.301 Basis, purpose, and scope.

(a) The rules in this subpart are based on, and are applicable solely to, alien amateur operations pursuant to section 303(1)(3) and 310(c) of the Communications Act of 1934, as amended. (See Pub. L. 93-505, 88 Stat. 1576.)

(b) The purpose of this subpart is to implement Public Law 88-313 by prescribing the rules under which an alien, who holds an amateur operator and station license issued by his government referred to in this subpart as an alien amateur, may operate an amateur radio station in the United States, in its possessions, and in the Commonwealth of Puerto Rico (referred to in this subpart only as the United States).

[30 FR 2706, Mar. 3, 1965, as amended at 40 FR 5368, Feb 5, 1975.]

#### § 97.303 Permit required.

(a) Before he may operate an amateur radio station in the United States, under the provisions of sections 302(1)(2) and 310(a) of the Communications Act of 1934, as amended, an alien amateur licensee must obtain a permit for such operation from the Federal Communications Commission. A permit for such operation shall be issued only to an alien holding a valid amateur operator and station authorization from his government, and only when there is in effect a bilateral agreement between the United States and that government for such operation on a reciprocal basis by United States amateur radio operators.

#### § 97.305 Application for permit.

(a) Application for a permit shall be made on FCC Form 610-A. Form 610-A may be obtained from the Commission's Washington, D.C., office, from any of the Commission's field offices and, in some instances, from United States missions abroad.

(b) The application form shall be completed in full in English and signed by the applicant. A photocopy of the



applicant's amateur operator and station license issued by his government shall be filed with the application. The Commission may require the applicant to furnish additional information. The application must be filed by mail or in person with the Federal Communications Commission, Washington, D.C., 20554, U.S.A. To allow sufficient time for processing, the application should be filed at least 60 days before the date on which the applicant desires to commence operation.

#### § 97.307 Issuance of permit.

(a) The Commission may issue a permit to an alien amateur under such terms and conditions as it deems appropriate. If a change in the terms of a permit is desired, an application for modification of the permit is required. If operation beyond the expiration date of a permit is desired, an application for renewal of the permit is required. In any case in which the permittee has, in accordance with the provisions of this subpart, made a timely and sufficient application for renewal of an unexpired permit, such permit shall not expire until the application has been finally determined. Application for modification or for renewal of a permit shall be filed on FCC Form 610-A.

(b) The Commission, in its discretion, may deny any application for a permit under this subpart. If an application is denied, the applicant will be notified by letter. The applicant may, within 90 days of the mailing of such letter, request the Commission to reconsider its action.

(c) Normally, a permit will be issued to expire 1 year after issuance but in no event after the expiration of the license issued to the alien amateur by his government.

[30 FR 2076, Mar. 3, 1965, as amended at 37 FR 23840, Nov. 9, 1972]

#### § 97.309 Modification, suspension, or cancellation of permit.

At any time the Commission may, in its discretion, modify, suspend, or cancel any permit issued under this subpart. In this event, the permittee will be notified of the Commission's action by letter mailed to his mailing address in the United States and the permittee shall comply immediately. A permittee may, within 90 days of the mailing of such letter, request the Commission to reconsider its action. The filing of a request for reconsideration shall not stay the

effectiveness of that action, but the Commission may stay its action on its own motion.

#### § 97.311 Operating conditions.

(a) The alien amateur may not under any circumstances begin operation until he has received a permit issued by the Commission.

(b) Operation of an amateur station by an alien amateur under a permit issued by the Commission must comply with all of the following:

(1) The terms of the bilateral agreement between the alien amateur's government and the government of the United States;

(2) The provisions of this subpart and of Subparts A through E of this part;

(3) The operating terms and conditions of the license issued to the alien amateur by his government; and

(4) Any further conditions specified on the permit issued by the Commission.

(c) An alien amateur may operate on dates, at locations, or via an itinerary, significantly different from that specified in the application for his permit only under the condition that he has given advance notice of the particulars of such operation to the Commission in accordance with the requirements of § 97.95(a).

[30 FR 2706, Mar. 8, 1965, as amended at 35 FR 7259, May 8, 1970]

#### § 97.313 Station identification.

(a) The alien amateur shall identify his station as follows:

(1) Radiotelegraph operation: The amateur shall transmit the call sign issued to him by the licensing country followed by a slant (/) sign and the United States amateur call sign prefix letter(s) and number appropriate to the location of his station.

(2) Radiotelephone operation: The amateur shall transmit the call sign issued to him by the licensing country followed by the words "fixed", "portable" or "mobile", as appropriate, and the United States amateur call sign prefix letter(s) and number appropriate to the location of his station. The identification shall be made in the English language.

(b) At least once during each contact with another amateur station, the alien amateur shall indicate, in English, the geographical location of his station as nearly as possible by city and State, commonwealth, or possession.

## APPENDIX 1

## EXAMINATION POINTS

Examinations for amateur radio operator licenses are conducted at the Commission's office in Washington, D.C., and at each field office of the Commission on the days designated by the Engineer in Charge of each office. Specific dates should be obtained from the Engineer in Charge of the nearest field office of the Commission.

Examinations are also given at prescribed intervals in the cities listed in the Commission's current Examination Schedule, copies of which are available from the Federal Communications Commission Regional Services Division, Washington, D.C. 20554, or from any one of the Commission's field offices listed in § 0.121.

[40 FR 17256, Apr. 18, 1975]

## APPENDIX 2

*Extracts From Radio Regulations Annexed to the International Telecommunication Convention (Geneva, 1959)*

## ARTICLE 41—AMATEUR STATIONS

Section 1. Radio communications between amateur stations of different countries<sup>1</sup> shall be forbidden if the administration of one of the countries concerned has notified that it objects to such radio communications.

Sec. 2. (1) When transmissions between amateur stations of different countries are permitted, they shall be made in plain language and shall be limited to messages of a technical nature relating to tests and to remarks of a personal character for which, by reason of their unimportance, recourse to the public telecommunications service is not justified. It is absolutely forbidden for amateur stations to be used for transmitting international communications on behalf of third parties.

(2) The preceding provisions may be modified by special arrangements between the administrations of the countries concerned.

Sec. 3. (1) Any person operating the apparatus of an amateur station shall have proved that he is able to send correctly by hand and to receive correctly by ear, texts in Morse code signals. Administrations concerned may, however, waive this requirement in the case of stations making use exclusively of frequencies above 144 MHz.

(2) Administrations shall take such measures as they judge necessary to verify the technical qualifications of any person operating the apparatus of an amateur station.

Sec. 4. The maximum power of amateur stations shall be fixed by the administrations concerned, having regard to the technical qualifications of the operators and to the conditions under which these stations are to work.

<sup>1</sup> As may appear in public notices issued by the Commission.

Sec. 5. (1) All the general rules of the Convention and of these Regulations shall apply to amateur stations. In particular, the emitted frequency shall be as stable and as free from spurious emissions as the state of technical development for such stations permits.

(2) During the course of their transmissions, amateur stations shall transmit their call sign at short intervals.

## RESOLUTION NO. 10

Relating to the use of the bands 7000 to 7100 kHz and 7100 to 7300 kHz by the Amateur Service and the Broadcasting Service.

The Administrative Radio Conference, Geneva, 1959,

*Considering—*

(a) That the sharing of frequency bands by amateur, fixed, and broadcasting services is undesirable and should be avoided;

(b) That it is desirable to have worldwide exclusive allocations for these services in Band 7;

(c) That the band 7000 to 7100 kHz is allocated on a worldwide basis exclusively to the amateur service;

(d) That the band 7100 to 7300 kHz is allocated in Regions 1 and 3 to the broadcasting service and in Region 2 to the amateur service;

*resolves,*

that the broadcasting service should be prohibited from the band 7000 to 7100 kHz and that broadcasting stations operating on frequencies in this band should cease such operation;

*and noting,*

the provisions of No. 117 of the Radio Regulations;

*further resolves,*

that interregional amateur contacts should be only in the band 7000 to 7100 kHz and that the administrations should make every effort to ensure that the broadcasting service in the band 7100 to 7300 kHz, in Regions 1 and 3, does not cause interference to the amateur service in Region 2; such being consistent with the provisions of No. 117 of the Radio Regulations.

[28 F.R. 14198, Dec. 21, 1963, as amended at 35 F.R. 13991, Sept. 3, 1970; 37 F.R. 6593, Mar. 31, 1972; 37 F.R. 18547, Sept. 13, 1972]

## APPENDIX 3

## CLASSIFICATION OF EMISSIONS

For convenient reference the tabulation below is extracted from the classification of typical emissions in Part 2 of the Commission's Rules and Regulations and in the Radio Regulations, Geneva, 1959, and it includes only those general classifications which appear most applicable to the Amateur Radio Service.



Type of modulation	Type of transmission	Symbol
Amplitude....	With no modulation.....	A8
	Telegraph without the use of modulating audio frequency (by on-off keying).	A1
Frequency (or phase).	Telegraphy by the on-off keying of an amplitude modulating audio frequency or audio frequencies or by the on-off keying of the modulated emission (special case: an unkeyed emission amplitude modulated).	
	Telephony.....	A3 <sup>1</sup>
	Facsimile.....	A4
	Television.....	A5
	Telegraphy by frequency shift keying without the use of a modulating audio frequency.	F1
	Telegraphy by the on-off keying of a frequency modulating audio frequency or by the on-off keying of frequency modulated emission (special case: an unkeyed emission frequency modulated).	F2
	Telephony.....	F3
	Facsimile.....	F4
	Television.....	F5
		P
Pulse.....		

<sup>1</sup> In Part 97, unless specified otherwise, A3 includes single and double side band with full, reduced, or suppressed carrier.

[28 F.R. 14198, Dec. 21, 1963]

#### APPENDIX 4

#### *Convention Between the United States of America and Canada, Relating to the Operation by Citizens of Either Country of Certain Radio Equipment or Stations in the Other Country (Effective May 15, 1952)*

##### ARTICLE III

It is agreed that persons holding appropriate amateur licenses issued by either country may operate their amateur stations in the territory of the other country under the following conditions:

(a) Each visiting amateur may be required to register and receive a permit before operating any amateur station licensed by his government.

(b) The visiting amateur will identify his station by:

(1) *Radiotelegraph operation.* The amateur call sign issued to him by the licensing country followed by a slant (/) sign and the amateur call sign prefix and call area number of the country he is visiting.

(2) *Radiotelephone operation.* The amateur call sign in English issued to him by the licensing country followed by the words, "fixed," "portable" or "mobile", as appropriate, and the amateur call sign prefix and call area number of the country he is visiting.

(c) Each amateur station shall indicate at least once during each contact with another station its geographical location as nearly as possible by city and state or city and province.

(d) In other respects the amateur station shall be operated in accordance with the laws and regulations of the country in which the station is temporarily located.

[28 F.R. 14199, Dec. 21, 1963]

#### APPENDIX 5

#### DETERMINATION OF ANTENNA HEIGHT ABOVE AVERAGE TERRAIN

The effective height of the transmitting antenna shall be the height of the antenna's center of radiation above "average terrain." For this purpose "effective height" shall be established as follows:

(a) On a U.S. Geological Survey Map having a scale of 1:250,000, lay out eight evenly spaced radials, extending from the transmitter site to a distance of 10 miles and beginning at 0° T. (0°, 45°, 90°, 135°, 180°, 225°, 270°, 315° T.) If preferred, maps of greater scale may be used.

(b) By reference to the map contour lines, established the ground elevation above mean sea level (AMSL) at 2, 4, 6, 8, and 10 miles from the antenna structure along each radial. If no elevation figure or contour line exists for any particular point, the nearest contour line elevation shall be employed.

(c) Calculate the arithmetic average of these 40 points of elevation (5 points of each of 8 radials).

(d) The height above average terrain of the antenna is thus the height AMSL of the antenna's center of radiation, minus the height of average terrain as calculated above.

NOTE 1: Where the transmitter is located near a large body of water, certain points of established elevation may fall over water. Where it is expected that service would be provided to land areas beyond the body of water, the points at water level in that direction should be included in the calculation of average elevation. Where it is expected that service would not be provided to land areas beyond the body of water, the points at water level should not be included in the average.

NOTE 2: In instances in which this procedure might provide unreasonable figures due to the unusual nature of the local terrain, applicant may provide additional data at his own discretion, and such data may be considered if deemed significant.

[37 F.R. 18547, Sept. 13, 1972]

## PART 99—DISASTER COMMUNICATIONS SERVICE

### Subpart A—General

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